

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

المجلس القومي السوداني للتخصصات الطبية  
Sudan Medical Specialisation Board (S.M.S.B)



# Clinical MD in Obstetrics & Gynacology

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## **1. PROGRAMME TITLE**

Clinical MD in Obstetrics & Gynaecology

## **2. INTRODUCTION**

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## 2.1 **Rationale and justification**

The MD-Sudan is an exit exam and until recently, the acquisition of clinical skills in obstetrics and gynaecology has been somewhat deficient.

The SMSB has recognized the need to formalize training and structured training programme has been developed.

Separate logbooks has been developed for intermediate and advanced training allowing the trainees to develop their ability to practice independently and all clinical experience should be logged in details following on as a continuum into Revalidation after acquisition of the MD-Sudan in O&G.

With the new design and regulations and with a strictly applied system of monitoring training, appraisal and assessment, for the first time there is an ordered structure to training in the registrar grade to equip all trainees with a broad range of understanding and competence in obstetrics and gynaecology and ensure that trainees become equipped for independent professional practice.

## 2.2 **Admission requirements :**

### 2.2.1 **Admission requirements for part- one:**

1. M.B.B.S
2. Full registration with Sudan Medical Council.

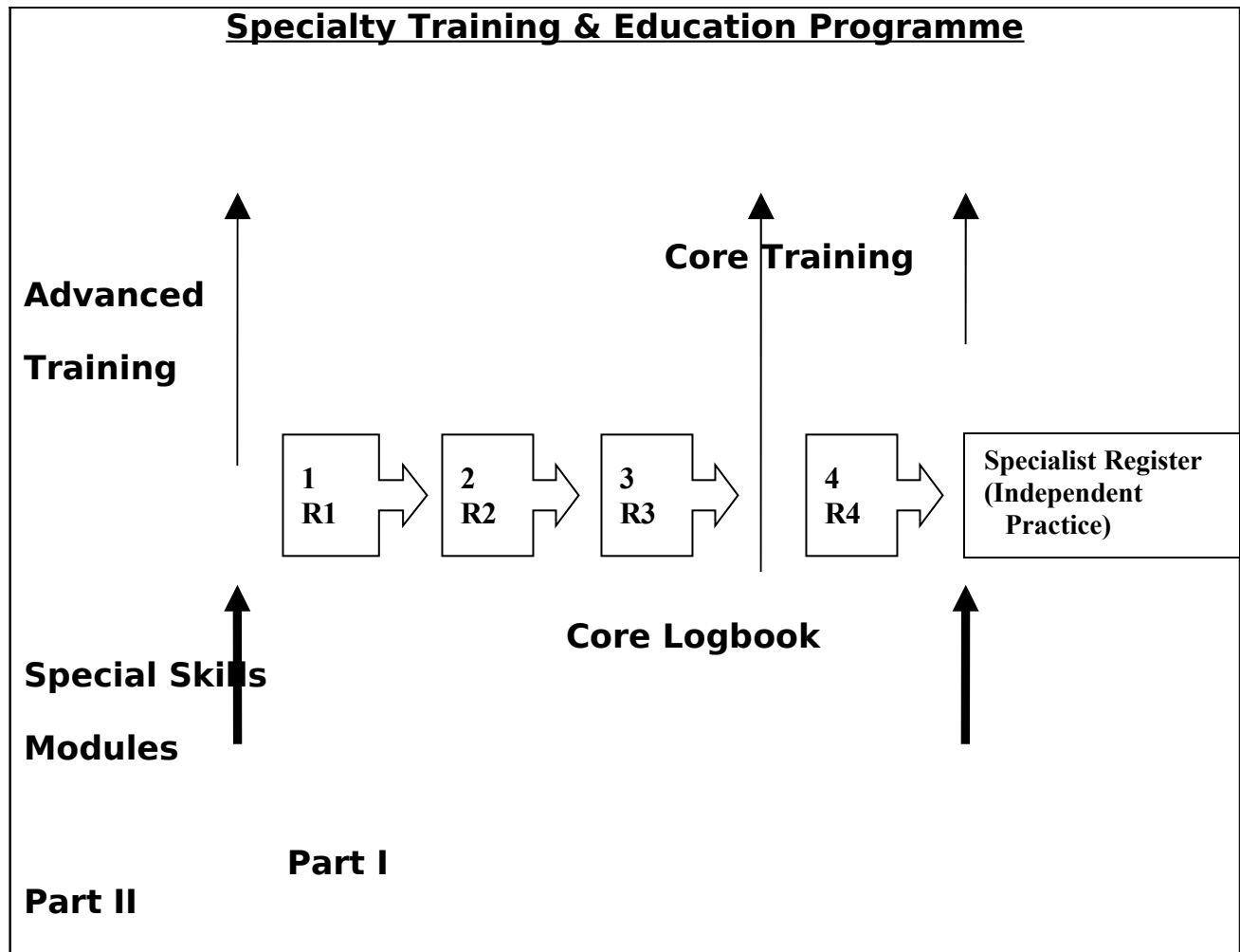
### 2.2.2 **Admission requirements for part – two:**

1. Registration with Sudan Medical Council.
2. Have passed part 1 MD (SUDAN), or a recognized equivalent by SMSB.
3. Registered with regulations of SMSB
4. Recommended by two practicing O/G consultants

## 2.3 **The duration of the programme:**

Sudan training in obstetrics and gynaecology (O&G) comprises a minimum of **4 years** specialty training in O&G. The programme is divided into two components: **core and advanced training**.

After successful completion of the programme, it is likely that you will be ready to sit the MD-Sudan Part II in O&G.



## 2.4 The role and responsibilities of trainees

The training portfolio will provide comprehensive record of the progress of the trainee, it therefore of major importance

for the trainees future and should be looked after with great care.

The trainees should make sure that the documents within the portfolio are signed by those responsible for his training. Each signature must be verified by the educational supervisor who was responsible for trainee at the time. Only original signatures will be acceptable to these assessing the progress of the trainee.

***The trainee should:***

- Attend academic activities, clinical rounds, on call duties, outpatient clinics and all other training activities.
- Achieve competence in the targets skills for each rotation (logbook).
- Attend the mandatory courses in each rotation.
- Fill the relevant portfolio forms for each rotation.

## **3. OBJECTIVES**

### **3-1 GENERAL OBJECTIVES**

1. Improve the health of women and their offspring.
2. Effectively reduce maternal and perinatal morbidity and mortality.
3. Improve the standards and sustainability of training of paramedical staff.
4. Adopt best practice at primary, secondary, and tertiary care levels.
5. Comply with the standards of medical ethics at all levels.
6. Foster the best practice in “ normal and abnormal “ functions relevant to obstetrics and gynaecology.

### **3.2 SPECIFIC OBJECTIVES:**

#### **Areas of professional development**

By the end of training the trainees should have acquired the following competencies and should be able to function successfully as:

**1. Medical expert:**

- Manage patients with conditions relating to female genito-urinary tract.
- Skillfully and humanely manage pregnant women.
- Adopt best practice at primary, secondary, and tertiary care levels.
- Effectively reduce maternal and perinatal morbidity and mortality.

**2. Communicator:**

- To demonstrate effective communication with patients and colleagues.
- To demonstrate good working relations with colleagues.
- To demonstrate the ability to work in clinical teams and have the necessary leadership skills.

**3. Collaborator:**

- Demonstrate collaboration with:
  - Other professionals.
  - Other agencies.

**4. Manager (administration and services):**

- To display knowledge of the structure and organization of the Ministry of Health nationally and locally.
- To understand and demonstrate appropriate skills and attitudes in relation to administration and management.

**5. Health advocate:**

- Can initiate an evidence-based, strategic action that can help to transform systems and improve the environments and policies which shape women behaviors and choices, and ultimately their health.

**6. Professionalism:**

- Actively fulfill a philosophy of obstetrics and gynaecology and a commitment to high standards of professional practice within the scope of obstetrics and gynaecology practice and the health care services.

### **7. Good medical practice:**

- To inculcate the habit of lifelong learning and continued professional development.
- To acquire the knowledge, skills and attitudes to act in a professional manner at all levels.

### **8. Research:**

- Understand and demonstrate appropriate skills and attitudes in relation to research relevant to the specialty.

### **9. Clinical Governance:**

- Understand and demonstrate appropriate knowledge and skills in relation to clinical governance (clinical effectiveness and risk management)

### **10. Teaching:**

- To understand and demonstrate appropriate skills and attitudes in relation to teaching.

### **11. Information use and management:**

- To achieve competence in the use and management of health information.

### **12. Managing self and others:**

- To develop skills in prioritizing work, and managing time effectively.
- Understanding of the appraisal system.
- To understand the responsibilities for trainees.

### **13. Negotiating and influencing skills:**

- To develop principles of effective negotiation.
- To enhance competence in formal and informal situations that requires assertive responses.

## **6. CONTENTS**

### **6.1 The general organization of the programme:**

The different rotations of the 4 years (Registrar Grade) consist of:

- Core training of 3 years.
- Advanced training of one year.  
Each year of the programme is divided into two rotations (6 months each)

## **CONTENTS OF PART-ONE**



The Part 1 O & G examination covers the basic and applied sciences relevant to the clinical practice of obstetrics and gynaecology.

## **Information Technology, Clinical Governance and Research**

Candidate should understand the principles of screening, clinical trial design and audit, and the statistical methods used in clinical research. You should know about levels of evidence, quantification of risk, informed consent, and ethical and regulatory approvals in research.

He/she should demonstrate an understanding of the principles of safe prescribing, quality control in medicine and the accuracy of tests.

## **Core Surgical Skills**

Trainee is expected to demonstrate an understanding of the underlying physiology, pathology and biophysics of basic surgical skills. He/she should understand the methods of measuring clinically important physiological variables, including the range of imaging techniques. He/she will be expected to demonstrate knowledge of the genomics, proteomics, physiology and pathology underpinning fluid and electrolyte balance, coagulation, control of blood flow, wound healing, inflammation and immune response, including tissue grafting. Also should be able to show understanding of the pathology and epidemiology surrounding surgical complications, including infection and its control and management, and trauma.

## **Postoperative Care**

Candidate should be expected to demonstrate knowledge of applied clinical science related to the postoperative period. This

will include physiological and biochemical aspects of fluid balance, the metabolism of nutrients after surgery, and the biochemistry of enzymes, vitamins and minerals. You should know about the organisms implicated in post-operative infections, and be familiar with the antibiotics used to treat them. He/she should be able to demonstrate knowledge of the other drugs used after surgery, including analgesics and thromboprophylactic agents, and should know the effects of drugs on renal and cardiac function. You should be familiar with the histology of the pelvic organs, the breast, and the endocrine organs, including the pituitary and the hypothalamus.

## **Surgical Procedures**

Trainee will need to demonstrate detailed knowledge of the surgical anatomy of the pregnant and non-pregnant female. This includes anatomy of the abdomen and pelvis, detailed functional anatomy of bones, joints, muscles, vasculature, lymphatic and nerve supply of pelvic structures including the genital, urinary and gastrointestinal tracts and of the pelvic floor. He/she needs to demonstrate knowledge of functional anatomy including mechanisms involved in continence, pelvic support and sexual response. You need to demonstrate knowledge of the impact of surgery and anaesthesia on the cells, tissues and organs including body responses to trauma, haemostasis and homeostasis. Also, need to demonstrate knowledge of the properties and effects of analgesic and anesthetic agents.

## **Antenatal Care**

The knowledge of the maternal anatomical adaptations occurring in pregnancy together with the endocrine and cellular physiology of the major organ systems in both the pregnant and non-pregnant state is needed. Candidate must understand the process of the graft versus host reaction and immunological adaptations occurring in pregnancy as well as the underlying immunological processes of infection, anaphylactic and allergy reactions and the effects of immunosuppressive drugs. You need to understand viral biology, infection and infection screening in pregnancy. Also needs an understanding of the pathology of lung,

renal and cardiac systems, the common haemoglobinopathies and connective tissue disorders as well as been able to define and interpret data on maternal mortality.

Added to that the need to understand the development and function of the placenta in pregnancy with a specific knowledge of how the placenta handles drugs.

These requirements also include principles of inheritance, the features and effects of common inherited disorders and knowledge of normal fetal physiology and development together with the aetiology of fetal malformations and growth problems and ability to define and interpret data on neonatal and perinatal mortality.

## **Maternal Medicine**

This includes the understanding of the pathological processes that underlie common maternal diseases that occur in pregnancy, e.g. diabetes, endocrine, respiratory, cardiac and haematological disease. In addition, the common infections those affect pregnant women and the treatments that are used. Acid base balance and of the normal ranges of electrolytes in pregnancy are of paramount importance to understand.

Then the drugs that are used to treat maternal disease and the potential maternal and fetal complications associated with their use. Others include imaging methods used to screen for maternal and fetal complications of maternal disease, e.g. ultrasound, X-ray and magnetic resonance imaging as well as fetal and placental growth and development and the immunological adaptations of pregnancy.

## **Management of Labour**

This includes the physiology, biochemistry and endocrinology of the onset of parturition and the maturation of the fetal endocrine system, the influence of hormones on signaling pathways in the myometrium, and the biochemistry of myometrial contractility.

Also the principles of tocolysis and stimulation of uterine contraction.

Candidate is expected to be able to describe fetal physiology in late pregnancy and should understand methods for fetal assessment in labour. He/she should also know about placentation, understand the implications of infection on labour, and know the optimal therapeutic options.

## **Management of Delivery**

This includes the knowledge of the anatomical adaptations of the pelvis and abdomen in late pregnancy and labour and the mechanism and physiology of childbirth and the third stage of labour. Moreover, the knowledge of the aetiology and pathology of congenital and bone malformations of the genital tract.

Then the mode of action of drugs used in labour, at delivery and the third stage of labour and the biochemical basis of acid-base balance.

## **Postpartum Problems**

This includes demonstrating an understanding of the physiology and structural changes in the neonate. In the mother, candidate should understand the physiology of lactation, uterine involution, and the pathology and management of puerperal sepsis and infection. He/she should be able to demonstrate an awareness of contraception and other drug use postpartum and during lactation.

## **Gynaecological Problems**

This includes the anatomy, physiology and histopathology of the pituitary and female reproductive tract. As well as including an understanding of changes at puberty, the menopause and during

the menstrual cycle including ovulation. Then the microbiology of the organisms present in and introduced into the reproductive tract, the lesions associated and the appropriate treatment. The principles of medical and surgical management of gynaecological problems.

## **Subfertility**

This includes understanding the structure (anatomy and development) and function (physiology and cell biology) of the organs of the male and female reproductive tract in context to their relevance to fertility and its disorders.

## **Sexual and Reproductive Health**

This includes the physiology, endocrinology, epidemiology and pharmacology of contraception. Candidate should demonstrate an understanding of the epidemiology of sexually transmitted infections (STIs), the microorganisms involved; the drugs used their treatment and the pathological features of sexually transmitted disease and should know about the drugs used in the medical termination of pregnancy.

## **Early Pregnancy Care**

It is expected to demonstrate knowledge of the basic sciences pertaining to early pregnancy and its loss. This will include the endocrine aspects of the maternal recognition of pregnancy, the luteal maintenance of early pregnancy and the physiology of feto-maternal communication. The candidate should have detailed knowledge of the histopathology of intra- and extra-uterine pregnancy loss, and of trophoblastic disease, as well as of the microorganisms responsible for pelvic inflammation. He/she should be familiar with the diagnostic features of ultrasound used in early pregnancy, the epidemiology of pregnancy loss and the medical agents used to manage early pregnancy loss – miscarriage, ectopic pregnancy and trophoblastic disease.

## **Gynaecological Oncology**

This includes the surgical anatomy of the abdomen and pelvis; understand the genetic origins of cancer and the principles of molecular testing for gynaecological cancer. Also pain pathways, transmission of pain centrally and the pathology of pain in gynaecological malignancy.

Then the structure, function and regulation of genes, chromosomes, DNA and RNA; an appreciation of cell biology including cell cycle control and carcinogenesis; immunological responses important in gynaecological oncology including tumour surveillance and immunotherapy and an awareness of hormone secreting and hormone dependent tumours.

In addition to the epidemiology of cancers effecting women; aetiological factors including the role of the Human Papillomavirus and other viral causes of cancer; the pathology and classification of gynaecological cancer and pre-malignant conditions as well that used for cervical cytology. You should be aware of the principles of laser and radiotherapy; properties and actions of drugs in the management of gynaecological cancer as well as the affects of chemotherapy on gonadal function.

## **Urogynaecology and Pelvic Floor Problems**

This includes the structure of the bladder and pelvic floor and their innervation. You should understand the mechanisms of continence and micturition. You should understand how congenital anomalies, pregnancy and childbirth, disease, infection and oestrogen deficiency affect these mechanisms and the impact of drugs on bladder function.

## 6.2 CONTENTS OF PART-TWO

1. Core Curriculum of eight modules & 11 mandatory courses.
2. Advanced Training Skills modules.

|                 |   |
|-----------------|---|
| <b>Module 1</b> | Communication & Basic Clinical Skills                                       |
| <b>Module 2</b> | Antenatal Care, Obstetric Ultrasound & Maternal Complications of Pregnancy. |
| <b>Module 3</b> | Management of Labour, Delivery & Postpartum Problems                        |
| <b>Module 4</b> | Basic Surgical Skills   |
| <b>Module 5</b> | Surgical Procedures   |

|                 |   |
|-----------------|---|
| <b>Module 6</b> | Gynae Problems, Pregnancy. loss, Contraception, Infertility & psychosexual Problems |
| <b>Module 7</b> | Teaching, Data handling, Audit, Evidence-based medicine & Risk management           |
| <b>Module 8</b> | Oncology & Urogynaecology and Pelvic Floor Problems                                 |

# Module 1

## BASIC CLINICAL SKILLS

### Learning outcomes:

- To understand and demonstrate the appropriate knowledge, skills and attitudes to perform specialist assessment of patients by means of clinical history taking and physical examination.
- To manage problems effectively and to communicate well with patients, relatives and colleagues in a variety of clinical situations.
- To demonstrate effective time management.

## HISTORY TAKING

### Knowledge Criteria :

- Define the patterns of symptoms in women presenting with obstetric and gynaecological problems



**Clinical Competency :**

- Take and analyse an obstetric and gynaecological history in a succinct and logical manner
- Manage difficulties of language, physical, educational and mental impairment
- Use interpreters and health advocates appropriately

**Professional skills and attitudes :**

- Show empathy and develop rapport with patients
- Acknowledge and respect cultural diversity
- Appreciate the importance of psychological factors for patients and their relatives
- Demonstrate an awareness of the interaction of social factors with the patient's illness
- Demonstrate an awareness of the impact of health problems on the ability to function at work and at home

**Training support :**

- StratOG.net

**Evidence/assessment:**

- Mini CEX
- MD Sudan
- Attitude Observation ( Form B1 )

## INTERNAL CLINICAL EXAMINATION AND INVESTIGATION

### **Knowledge criteria:**

- Understand the pathophysiological basis of physical signs
- Understand the indications, risks, benefits and effectiveness of investigations

### **Clinical competency:**

- Perform a reliable and appropriate examination, including:
  - o Breast examination
  - o Abdominal examination
    - Nonpregnant
    - Pregnant
  - o Vaginal examination
    - Bimanual
    - Cusco's, Sims' speculum
  - o Microbiology swabs
    - k Throat, vagina, cervix, urethra, rectum,
  - o Cervical smear
- Perform investigations competently where relevant
- Interpret the results of investigations
- Liaise and discuss investigations with colleagues

### **Professional skills and attitudes:**

- Respect patients' dignity and confidentiality
- Acknowledge and respect cultural diversity
- Involve relatives appropriately
- Appreciate the need for a chaperone
- Appreciate the need for a patient to seek a female attendant
- Provide explanations to patients in language they can understand
- Insight into one's ability and the need to ask for help

**Training support:**

- Sudan Medical Council Good Medical Practice
- Maintaining Good Medical Practice in Obstetrics and Gynaecology: the Role of the RCOG (RCOG, February 1999; ISBN 1-900364-22-0)
- Gynaecological Examinations: Guidelines for Specialist Practice (RCOG, July 2002, 1-900364-77-8)

**Evidence/assessment:**

- Logbook
- Reflective practice ( A 12 )

## NOTE KEEPING

### **Knowledge criteria:**

- Understand the importance and conventions of accurate clinical note keeping
- Know the relevance of data protection pertaining to patient confidentiality

### **Clinical competency:**

- Record and communicate concisely, accurately, confidentially and legibly the results of the history, examination, investigations, differential diagnosis and management plan
- Mark each note entry with date, signature, name and status

### **Professional skills and attitudes:**

- Appreciate the importance of timely dictation, cost effective use of medical secretaries and increasing use of electronic communication
- Understand the limitations and problems of electronic communication
- Communicate promptly and accurately with primary care and other agencies
- Demonstrate courtesy towards secretaries, clerical and other staff

### **Training support:**

- Caldicott Committee Report on the review of patient identifiable information (DH, 1997)

**Evidence/assessment:**

- Attitude Observation ( Form B1 )

## **TIME MANAGEMENT AND DECISION MAKING**

**Knowledge criteria:**

- Understand clinical priorities

**Clinical competency:**

- Prioritize tasks
- Work with increasing efficiency as clinical skills develop
- Know when to get help
- Anticipate future clinical events and plan appropriately

**Professional skills and attitudes:**

- Have realistic expectations of tasks to be completed and timeframe for tasks
- Have the ability to prioritise workload
- Appreciate the internal signs of one's own stress and ask for help
- Be willing to consult and work as part of a team
- Be receptive to feedback of performance

- Learn to be flexible and be willing to take advice and change in the light of new information

**Evidence/assessment:**

- Attitude Observation ( Form B1 )
- MD -- Sudan

## COMMUNICATION

**Knowledge criteria:**

- Understand the components of effective verbal and nonverbal communication

**Clinical competency:**

- Demonstrate listening skills
- Use open questions where possible
- Avoid jargon
- Communicate clearly both verbally and in writing to patients, including those whose first language may not be English
- Give clear information and feedback and share communication with patients and relatives
- Break bad news sensitively

**Professional skills and attitudes:**

- **Demonstrate an ability to:**
  - Involve patients in decision making
  - Offer choices

- Acknowledge and respect diversity
- Respect patients' views
- Use appropriate nonverbal communication

**Training support:**

- Local and regional courses in 'breaking bad news'
- RCOG patient information (**[www.rcog.org.uk](http://www.rcog.org.uk)**)
- StratOG.net: The Obstetrician and Gynaecologist as a Teacher and Researcher. Communication skills e-tutorial
- SANDS guidance for professionals

**Evidence/assessment:**

- Attitude Observation ( Form B1 )
- MD – Sudan
- Mini CEX
- Certificate of completion of communication skills course

# Module 2

## ANTENATAL CARE, OBSTETRIC ULTRASOUND SCAN & MATERNAL MEDICINE

### Learning outcomes:

- To understand and demonstrate appropriate knowledge, skills and attitudes in relation to Antenatal care.
- To understand and demonstrate appropriate knowledge, skills and attitudes in relation to maternal medicine.

### **Antenatal Care**

### Knowledge criteria:



- Preconception care
- Purposes and practice of antenatal care
- Recognition of domestic violence
- Problems of teenage pregnancy
- Awareness of drug and alcohol misuse
- Management of normal pregnancy, birth and puerperium
- Placental abnormalities and diseases
- Genetic modes of inheritance, common genetic conditions and the diagnosis thereof .
- Epidemiology, aetiology, pathogenesis, diagnosis, prevention, management, delivery, complications of:
  - o pregnancy-induced hypertension
  - o haemorrhage
  - o preterm prelabour rupture of membranes
  - o multiple pregnancy
  - o malpresentation
  - o fetal growth restriction:
  - o fetal haemolysis
  - o prolonged pregnancy
  - o congenital malformation
  - o social and cultural factors
- Immunology and immunological disorders affecting pregnancy
- Basic obstetric ultrasound
- Basic fetal and placental anatomy to define fetal orientation
- Identify features: head, chest, abdomen
- Awareness of the use of transvaginal confirmation of viability < 14 weeks
- Assessment of liquor volume

**Clinical competency:**

- Undertake pregnant and nonpregnant abdominal examination
- Take obstetric history and make relevant referral in cases of domestic violence
- Conduct booking visit
- Conduct follow-up visits
- Arrange appropriate investigations

- growth restriction
- mode of delivery after caesarean section
- multiple pregnancy
- antepartum haemorrhage
- malpresentation
- preterm prelabour rupture of the fetal membranes
- reduced fetal movements
- prolonged pregnancy
- drug and alcohol abuse in pregnancy
- Perform:
  - external cephalic version
  - cervical cerclage
- Counsel about:
  - screening for Down syndrome
  - genetic disease
  - fetal abnormality
  - haemolytic disease
  - infection
  - mode of delivery

### **Professional skills and attitudes:**

- Have the skills to liaise with midwives and other health professionals to optimize care of the woman
- Demonstrate the skills to empower and inform woman to make appropriate choices for herself and her family in pregnancy and childbirth
- Demonstrate an ability to explain correctly and place in context for the woman:
  - detection rates and limitations of anomaly screening
  - principles of screening for neural tube defects, Down syndrome and haemoglobinopathies
  - genetic disorders and their inheritance, with examples such as Tay-Sachs disease, cystic fibrosis and thalassaemia
  - effects upon fetus and neonate of infections during pregnancy, including HIV, measles, chickenpox, rubella, cytomegalovirus, parvovirus and toxoplasmosis
- Show awareness of the need to identify and deal with domestic violence and have a

- working knowledge of child protection issues as they relate to the practice of obstetrics and gynaecology

**Training support:**

- Appropriate postgraduate educational courses, including CTG interpretation courses
- Perinatal morbidity and mortality meetings
- Risk assessment meetings
- StratOG.net: Antenatal Care e-tutorials
- Useful websites and postoperative care e-tutorials:
  - [www.nice.org.uk](http://www.nice.org.uk)
  - [www.rcog.org.uk](http://www.rcog.org.uk)
  - [www.sign.ac.uk](http://www.sign.ac.uk)
  - [www.show.scot.nhs.uk/spcerh](http://www.show.scot.nhs.uk/spcerh)

**Evidence/assessment:**

- MD – Sudan
- Logbook
- Local meetings attended
- Case reports
- Audit project
- Certificate of completion of yCTG training
- Attitude Observation ( Form B1 )
- Mini CbD
- Mini CeX

***Details of knowledge criteria (Antenatal Care)***

**Preconception care:**

- Sources of detailed information accessed by patients
- Effect of pregnancy upon disease
- Effect of disease upon pregnancy
- Principles of inheritance of disease
- Teratogenesis
- Drugs and pregnancy

**Purposes and practice of antenatal care:**

- Arrangements for and conduct of booking visit
- Arrangements for and conduct of follow-up visits
- Use of imaging techniques
- Screening for abnormality
- Health education
- Liaison between health professionals
- Recognition of domestic violence

**Physiology and management of normal:**

- Pregnancy
- Childbirth, including delivery outside specialist unit
- Puerperium, including lactation
- Neonate, including feeding

**Placental:**

- Abnormalities (shape, size, implantation)
- Chorioamnionitis
- Infarction
- Chorioangioma
- Multiple pregnancy
- Intrauterine growth restriction
- Cord abnormalities
- Trophoblastic disease

**Immunology:**

- Immunological pregnancy tests
- Rhesus and other isoimmunisation
- Autoimmune diseases

**Preterm prelabour rupture of membranes:**

- Fetal pulmonary maturity
- Therapy (steroids, antibiotics, tocolytics)
- Infection (risks, management)
- Delivery (induction of labour, timing, mode)

**Haemorrhage:**

- Placental abruption
- Placenta praevia
- Vasa praevia
- Placenta accreta

- Trauma

**Multiple pregnancy:**

- Zygosity
- Impact of assisted reproduction techniques
- Placentation
- Diagnosis
- Management (antenatal, intrapartum, postnatal)
- Special procedures (prenatal diagnosis, monitoring)
- Feeding
- Higher order multiple pregnancies (counselling, community care)

**Malpresentation:**

- Types (breech, brow, face, shoulder, variable lie)
- Diagnosis
- Management (antenatal, intrapartum)
- Mode of delivery

**Fetal growth restriction:**

- Aetiology (maternal, placental, fetal)
- Diagnosis (clinical, imaging, biochemical, genetic)
- Monitoring (ultrasound, cardiotocography)
- Delivery (timing, method)
- Prognosis (fetal, neonatal)

**Genetic:**

- Modes of inheritance (Mendelian, multifactorial)
- Cytogenetics
- Phenotypes of common an euploidies (Down syndrome, Edward syndrome, Patau syndrome, Turner's yndrome, Klinefelter syndrome, triple X, multiple Y)
- Translocation
- Miscarriage
- Molecular genetics (DNA transcription, DNA translation, DNA blotting techniques, gene amplification techniques, principles of gene tracking)
- Counselling (history taking, pedigree analysis)
- Population screening (genetic disease, congenital malformations)

- Antenatal diagnosis (chromosomal defects, inborn errors of metabolism, neural tube defects, other major structural abnormalities)
- Management: referral to specialist team, antenatal intervention, delivery, neonatal investigation, neonatal care (medical, surgical)

### **Pregnancy-induced hypertension:**

- Definitions
- Aetiological theories
- Prophylaxis
- Assessment of severity
- Consultation
- Therapy
- Delivery (timing, method)
- Complications (eclampsia, renal, haemorrhagic, hepatic, fetal)

### **Hypotensive disorders:**

- Hypovolaemia
- Sepsis
- Neurogenic shock
- Cardiogenic shock
- Anaphylaxis
- Trauma
- Amniotic fluid embolism
- Thromboembolism
- Uterine inversion

### **Fetal haemolysis:**

- Relevant antigen-antibody systems
- Prevention
- Fetal pathology
- Diagnosis
- Assessment of severity
- Intrauterine transfusion (indications, techniques, referral)
- Delivery (timing, method)
- Counselling

### **Prolonged pregnancy:**

- Risks
- Fetal monitoring
- Delivery (indications, methods)
- **Congenital malformation:**
- Screening
- Amniotic fluid volume (polyhydramnios, oligohydramnios)
- Management: diagnosis, consultation, viability, delivery (time, place, method), counselling
- Specific abnormalities:
  - o head (anencephaly, microcephaly, encephalocele, hydrocephalus, hydranencephaly, holoprosencephaly)
  - o skeleton (spina bifida, phocomelia, chondrodysplasia, intrauterine amputation)
  - o heart (major defects, other defects)
  - o lungs (pulmonary hypoplasia)
  - o urinary (renal agenesis, polycystic kidneys, urinary tract obstruction)
  - o genital (intersex, genital tract abnormalities, ovarian cyst)
  - o gastrointestinal (abdominal wall defects, oesophageal atresia, duodenal atresia, diaphragmatic hernia, bowel obstruction)
  - o other (cystic hygroma)
- Other fetal disorders:
  - o non-haemolytic hydrops fetalis
  - o tumours
  - o pleural effusion
  - o fetal bleeding

**Social and cultural factors:**

- Effect upon pregnancy outcome
- Teenage motherhood
- Parent-baby relationships (factors promoting, factors interfering)
- Bereavement counseling

## ULTRASOUND

### **Knowledge criteria:**

- Role and use of ultrasound in antenatal care

### **Clinical competency:**

- Assess fetal wellbeing by interpretation of CTG and ultrasound
- Determine fetal viability by transabdominal ultrasound (see basic ultrasound module –
  - o Early Pregnancy 8-12 weeks)
- Perform a transabdominal scan after 14weeks of gestation



- Identify features of the head, chest, abdomen
- Determine fetal lie and presentation
- Determine placental site
- Assess liquor volume by deepest pool

**(See basic ultrasound module – ultrasound assessment of fetal size, liquor and the placenta )**

**Professional skills and attitudes:**

- Demonstrate the use of appropriate referral pathways and local protocols if abnormal ultrasound findings are suspected

**Training support:**

- Mandatory education and training sessions
- Theoretical accredited course
- Supervised structured clinical learning sessions
- Ad hoc sessions in antenatal wards and in delivery suite supplemented by attendance at sessions in an obstetric ultrasound department, including anomaly and fetal assessment scans

**Evidence/assessment:**

- Certificate of course attendance
- MD – Sudan

***Details of Knowledge Criteria (Ultrasound Scan)***

**Principles of ultrasound:**

- Basic physics
- Safety
- Relationship between two dimensional screen image and three dimensional object

- **Ultrasound assessment of fetal wellbeing:**

- Fetal biometry (pregnancy dating, gestational age, fetal growth)

- Biophysical profile
- Use of Doppler to assess blood flow (fetus, uterus)
- Indications and limitations of scanning in late pregnancy
- Ultrasound surveillance in twin pregnancy

**Techniques of fetal anomaly scanning and non-invasive fetal diagnosis:**

- Use of nuchal translucency measurements to identify fetuses at high risk of Down syndrome
- Combination of ultrasound and other risk markers to create an individual risk profile for each Woman

**Invasive procedures:**

- Amniocentesis
- Chorionic villus sampling
- Placentesis
- Cordocentesis

**Identify fetal position and fetal heart in later pregnancy and to create a**

**three-dimensional image of the fetus in the mind:**

- Identify the fetus
- Determine the lie of the fetus
- Be familiar with manoeuvres to identify position of fetal heart
- Identify fetal heart pulsations (use of transvaginal ultrasound at less than 14 weeks)
- Demonstrate fetal heart pulsations to mother

**Orientate ultrasound findings in the second and third trimesters and orientate the fetus correctly in the uterus:**

- Determine lie and position of fetus
- Identify features of the head
- Identify features of the chest
- Identify features of the abdomen
- Locate best position to measure abdominal circumference
- Identify the spine
- Identify the limbs

- Perform basic fetal measurements (e.g. those of biparietal diameter, head circumference, abdominal circumference, femur length, estimation of fetal weight)

**Localize the placenta in the third trimester:**

- Find the placenta
- Describe its features:
  - o texture
  - o echolucent areas
  - o chorionic plate
  - o echogenicity
- Define its upper and lower borders
- Relate it to other features such as bladder and cervix

## MATERNAL MEDICINE

**Knowledge criteria:**

- Understand the epidemiology, aetiology, pathophysiology, clinical characteristics,
  - o prognostic features and management of:
  - o hypertension
  - o kidney disease
  - o heart disease
  - o liver disease
  - o circulatory disorders

- disorders of carbohydrate metabolism
- other endocrinopathies
- gastrointestinal disorders
- pulmonary diseases
- connective tissue diseases
- bone and joint disorders
- psychiatric disorders
- infectious diseases
- neurological diseases
- Maternal complications due to pregnancy

**Clinical competency:**

- Diagnose, investigate and manage, with direct supervision:
  - pregnancy-induced hypertension
  - thromboembolism
  - impaired glucose tolerance
  - insulin-dependent diabetes
  - essential hypertension
  - kidney disease
  - liver disease
  - maternal haemoglobinopathy
  - coagulation disorders
  - acute abdominal pain
  - asthma
  - inflammatory bowel disease
  - intercurrent infection
  - psychological disorders
  - infectious disease
  - epilepsy
  - endocrinopathies

**Professional skills and attitudes:**

- Have the ability to recognize the normal from the abnormal
- Develop the skills to competently formulate a list of differential diagnoses
- Have the skills to request the relevant investigations to support the differential diagnoses

- Competently demonstrate the skills to formulate a management plan
- Have the ability to implement a plan of management and modify if necessary
- Develop the skills to liaise effectively with colleagues in other disciplines, both clinical and nonclinical

### **Training support:**

- Local and regional courses
- Attendance at medical disorders antenatal clinic
- StratOG.net: Maternal Medicine e-tutorials
- Useful websites:
  - o [www.nice.org.uk](http://www.nice.org.uk)
  - o [www.rcog.org.uk](http://www.rcog.org.uk)
  - o [www.sign.ac.uk](http://www.sign.ac.uk)
  - o [www.show.scot.nhs.uk/spcerh](http://www.show.scot.nhs.uk/spcerh)
  - o [www.bmfms.org.uk](http://www.bmfms.org.uk)

### **Evidence/assessment:**

- Logbook
- Reflective practice ( A12 )
- MD – Sudan
- Case reports
- Audit projects

## ***Details of Knowledge Criteria (Maternal Medicine)***

**Understand the epidemiology, aetiology, pathophysiology, clinical characteristics, prognostic features and management of:**

### **Hypertension:**

- Definitions
- Aetiological theories

- Organ involvement (mother, fetus)
- Diagnosis
- Drug therapy

**Kidney disease:**

- Urinary tract infection
- Pyelonephritis
- Glomerulonephritides
- Nephrotic syndrome
- Tubular necrosis
- Cortical necrosis
- Transplantation

**Pulmonary diseases:**

- Asthma
- Infection
- Embolism
- Aspiration syndrome

**Neurological disorders:**

- Epilepsy
- Cerebrovascular disease
- Multiple sclerosis
- Migraine
- Neuropathies
- Myasthenia gravis
- Paraplegia

**Bone and joint disorders:**

- Backache
- Symphyseal separation
- Metabolic bone disease
- Neoplasms (benign and malignant):
- Genital tract
- Breast
- Other

**Psychiatric disorders:**

- Manic depressive disorders
- Psychoneurosis

- Puerperal disorders (blues, depression)
- Mood disorders
- Schizophrenia
- Reaction to pregnancy loss

**Gastrointestinal disorders:**

- Nausea
- Vomiting
- Hyperemesis
- Gastric reflux
- Abdominal pain
- Appendicitis
- Inflammatory bowel disease
- Intestinal obstruction

**Heart disease:**

- Congenital
- Rheumatic
- Ischaemic
- Cardiomyopathy
- Heart failure

**Liver disease:**

- Cholestasis
- Hepatitis
- Acute fatty degeneration

**Circulatory disorders:**

- Anaemia
- Sickle cell disease
- Thalassaemias
- Coagulation defects
- Thrombocytopenias
- Thromboembolism
- Transfusion
- Replacement of blood constituents
- Varicose veins (legs, vulva, haemorrhoids)

**Connective tissue diseases:**

- Systemic lupus erythematosus

- Rheumatoid arthritis
- Immunosuppressant drugs

**Disorders of carbohydrate metabolism:**

- Diagnosis
- Type 1 and type 2 diabetes
- Hazards (maternal, fetal, neonatal)
- Ketoacidosis
- Diet
- Drugs (insulins, oral hypoglycaemic agents and pregnancy)

**Other endocrinopathies:**

- Thyroid (diagnosis, assessment, antibodies, therapy, fetal hazards)
- Adrenal (Addison's disease, acute adrenal failure, congenital adrenal hyperplasia, phaeochromocytoma)
- Pituitary (prolactinoma, hypopituitarism, diabetes insipidus)

**Infectious diseases:**

- Investigation of pyrexia
- Serological tests
- Principles (prevention, detection, isolation)
- Therapy (prophylaxis, immunization, antibiotics, antiviral agents)
- Maternal (preterm prelabour rupture of membranes, preterm labour, chorioamnionitis, puerperal sepsis, mastitis, urinary tract infection, wound infections, septic shock, malaria, other tropical infections and infestations)
- Fetus and neonate (streptococcus, gonococcus, syphilis, toxoplasma, listeria, haemophilus, chlamydia, mycoplasma, ureaplasma, herpes hominis, rubella, cytomegalovirus, varicella, hepatitis A, hepatitis B, hepatitis C, parvovirus, influenza, human immunodeficiency virus, neonatal sepsis)

**Maternal complications due to pregnancy:**

- Antepartum haemorrhage
- Amniotic fluid embolism
- Sheehan syndrome



# Module 3

## **MANAGEMENT OF LABOUR, DELIVERY & POSTPARTUM PROBLEMS**

**Learning outcomes:**

- To understand and demonstrate appropriate knowledge, skills and attitudes in relation to labour.
- To understand and demonstrate appropriate knowledge, skills and attitudes relating to management of delivery.
- To understand and demonstrate appropriate knowledge, skills and attitudes in relation to postpartum problems.
- To understand and demonstrate appropriate knowledge, skills and attitudes in relation to neonatal problems.

## **Management of Labour**

**Knowledge criteria:**

- Mechanisms of normal labour and delivery
- Induction and augmentation of labour
- Drugs acting upon the myometrium
- Structure and use of partograms
- Fluid balance in labour
- Blood products
- Regional anaesthesia, analgesia and sedation
- Fetal wellbeing and compromise
- Prolonged labour
- Emergency policies / maternal collapse / haemorrhage
- Preterm labour / premature rupture of membranes
- Cervical cerclage
- Multiple pregnancy in labour
- Severe pre-eclampsia and eclampsia
- Intrauterine fetal death , including legal issues
- Acute abdominal pain

**Clinical competency:**

■Manage:

- in-utero transfer
- intrauterine fetal death
- women who decline blood products
- obstetric haemorrhage
- severe pre-eclampsia
- obstetric collapse

■Prioritise labour ward problems

■Evaluate clinical risk

■Liaise with other staff

■Interpret a CTG

■Manage:

- induction of labour
- delay in labour
- labour after a previous lower-segment caesarean section
- preterm labour

■Perform and interpret a fetal blood sample

■Prescribe blood products appropriately

■Advise on pain relief

■Remove a cervical cerclage

■Counsel and consent for fetal postmortem examination in cases of intrauterine fetal death

■Manage abdominal pain

**Professional skills and attitudes:**

■Demonstrate the appropriate use of protocols and guidelines

■Demonstrate the ability to prioritise cases and have the skills to supervise the workload on a labour ward

■Respect cultural and religious differences in attitudes to childbirth

■Practice effective liaison with colleagues in other disciplines , clinical and nonclinical

■Demonstrate the ability to deal sensitively with the issues regarding intrauterine fetal death

■Recognise personal limitations and the need to refer appropriately

**Training support:**

- CTG training
- Eclampsia drill
- Drill for obstetric collapse
- Communication in an emergency
- ‘Breaking bad news’ study session
- Perinatal mortality and morbidity meetings
- StratOG.net: Management of Labour and Delivery e-tutorials
- Disposal of fetal parts
- Disposal Following Pregnancy Loss Before 24 Weeks of Gestation (RCOG, January 2005)
- EMONC course
- Useful websites:
  - **[www.nice.org.uk](http://www.nice.org.uk)**
  - **[www.rcog.org.uk](http://www.rcog.org.uk)**
  - **[www.sign.ac.uk](http://www.sign.ac.uk)**
  - **[www.show.scot.nhs.uk/spcerh](http://www.show.scot.nhs.uk/spcerh)**

### **Evidence/assessment:**

- Meetings attended
- Case reports
- Audit project
- MD – Sudan
- Logbook
- Reflective practice ( A12 )
- OSATS – Fetal blood sampling

### ***Details of knowledge criteria (Management of Labour)***

- Mechanisms of normal and abnormal labour.
- Mechanism of spontaneous vaginal delivery.
- Methods of induction of labour; indications, contraindications and complications.
- Methods of augmentation of labour; indications, contraindications and complications.
- Drugs acting upon the myometrium and cervix.
- Structure and use of partograms.
- Fluid balance in labour.
- Transfusion.

- Types and methods of action of regional anaesthesia including epidural (lumbar, caudal), spinal, pudendal nerve block; indications and contraindications.
- Types and methods of action of analgesia and sedation including narcotics, hypnotics, psychotropics, nonsteroidal anti-inflammatory drugs; indications, contraindications.
- Complications of anaesthesia and analgesia including cardiac arrest, respiratory arrest, aspiration, drug reactions.
- Assessment of fetal wellbeing using fetal heart rate monitoring, acid/base balance, and fetal scalp blood sampling.
- Causes and management of fetal compromise, including cord prolapse and intrauterine fetal death.
- Intrauterine fetal death: legalities regarding registration and disposal of fetal tissue.
- Causes and management of prolonged labour.
- Causes and management of maternal collapse, including massive haemorrhage, cardiac problems, pulmonary and amniotic embolism, drug reactions, trauma.
- Emergency guidelines and procedures.
- Ante- and intrapartum haemorrhage, including placenta praevia, vasa praevia, ruptured uterus, coagulation defects, iatrogenic causes.
- Causes, mechanisms of action and complications of preterm labour/premature rupture of membranes including fetal pulmonary maturity, infection risks
- Preterm labour, including therapy (antibiotics, steroids, tocolysis), consultation with neonatologists, in utero transfer, methods of delivery (induction of labour, timing, mode), outcomes, risks.
- Role and types of cervical cerclage.
- Multiple pregnancy in labour.
- Severe pre-eclampsia and eclampsia.
- placental abruption

## MANAGEMENT OF DELIVERY

### **Knowledge criteria:**

- Normal vaginal delivery
- Operative vaginal delivery

- Complex vaginal delivery
- Retained placenta
- Caesarean section
- Sterilisation procedures
- General anaesthesia
- Regional anaesthesia
- The unconscious patient

**Clinical competency:**

- Normal delivery
- Vacuum extraction without rotation
- Forceps delivery without rotation
- Shoulder dystocia
- Retained placenta
- Recognition of malpresentation
- Caesarean section with sterilisation
- Cord prolapse
- Uncomplicated caesarean section
- Repeat caesarean section
- Acute emergency caesarean section
- Rotational assisted delivery
- Vaginal delivery of twins
- Vaginal breech delivery
- Delivery with fetal malpresentation
- Previously undiagnosed breech
- Caesarean section with placenta praevia
- Uterine rupture
- Vaginal breech delivery including second twin

**Professional skills and attitudes:**

- Make appropriate decisions in the choice of delivery in partnership with the mother and respect the views of other healthcare workers (midwives)
- Be aware of emotional implications for woman, family and staff
- Acknowledge and respect cultural diversity
- Respect individual dignity and privacy
- Respect confidentiality

- Demonstrate the ability to communicate clearly and effectively at times of stress
- Show ability to prioritise workload
- Demonstrate team management and show leadership according to year of training
- Be realistic recognition of own competence level and have self awareness to call for help when necessary
- Demonstrate the use of appropriate protocols and guidelines

**Training support:**

- Shoulder dystocia drill
- Perinatal mortality and morbidity meetings
- StratOG.net: Management of Labour and Delivery e-tutorials
- EMONC course
- Local protocols
- Useful websites:
  - [www.nice.org.uk](http://www.nice.org.uk)
  - [www.rcog.org.uk](http://www.rcog.org.uk)
  - [www.sign.ac.uk](http://www.sign.ac.uk)
  - [www.show.scot.nhs.uk/spcerh](http://www.show.scot.nhs.uk/spcerh)

**Evidence/assessment:**

- Audit project
- MD – Sudan
- Logbook
- Reflective practice ( A12 )
- EMONC course
- OSATS:
  - Operative vaginal delivery
  - Caesarean section
  - Manual removal of Placenta

***Details of knowledge criteria (Management of Delivery)***

**Operative/complex vaginal delivery:**

- Malpresentation (brow, face, shoulder, variable lie)
- Malposition
- Manual rotation of the fetal head
- Outlet forceps/ventouse
- Mid-cavity forceps / ventouse
- Rotational forceps / ventouse
- Pelvic floor anatomy
- Episiotomy
- Perineal trauma and repair
- Assisted breech delivery
- Breech extraction
- Twin delivery
- High order multiple births
- Shoulder dystocia
- Caesarean section:
  - Indications and complications
  - Routine
  - Repeat
  - Acute emergency
  - Sterilisation procedures

### **Anaesthesia:**

- General
- Regional
- Induction agents
- Inhalation agents
- Prophylactic measures
- Complications

**The unconscious patient**  
**Resuscitation**  
**Intensive care**

## **POSTPARTUM PROBLEMS (THE PUERPERIUM)**

### **Knowledge criteria:**



- Normal and abnormal postpartum period
- Techniques for control of postpartum haemorrhage
- Appropriate use of blood and blood products
- Perineal surgery
- Postpartum and postoperative complications
- Retained placenta
- Normal and abnormal postpartum period
- Infant feeding

**Clinical competency:**

- Demonstrate skills in acute resuscitation
- The normal puerperium, including contraception
- Breast problems
- Perineal and vaginal tears
- Damage to rectum and anal sphincters
- Manual removal of placenta
- Postpartum sepsis
- Primary, secondary and other postpartum haemorrhage
- Acute maternal collapse
- Puerperal psychiatric disorders

**Professional skills and Attitudes:**

- Demonstrate the ability to counsel women about management and implications of anal sphincter trauma
- Understands the roles of other healthcare professionals (e.g. social workers, psychiatrists, physiotherapists)
- Be aware of Breastfeeding Initiative
- Display empathy with women with puerperal problems and their families

**Training support:**

- Massive haemorrhage drill
- Problems after childbirth
- Counselling after perinatal loss
- Perineal trauma course
- Perinatal mortality and morbidity meetings
- StratOG.net: Postpartum and Neonatal Problems e-tutorials

■ Useful websites:

- [www.nice.org.uk](http://www.nice.org.uk)
- [www.rcog.org.uk](http://www.rcog.org.uk)
- [www.sign.ac.uk](http://www.sign.ac.uk)
- [www.show.scot.nhs.uk/spcerh](http://www.show.scot.nhs.uk/spcerh)

**Evidence/assessment:**

- Meetings attended
- Case reports
- Reflective practice ( A12 )
- Audit project
- MD – Sudan
- OSATS:
  - Perineal repair
  - Manual removal of placenta

***Details of knowledge criteria (Postpartum Problems)***

**Epidemiology, aetiology, pathogenesis, recognition, diagnosis, prevention, management, complication, prognosis regarding:**

- uterine involution
- bleeding, including placenta accreta, atonic uterus
- retained placenta, retained products of conception
- pyrexia
- infections
- maternal collapse, including massive haemorrhage, cardiac problems, pulmonary and amniotic embolism, drug reactions, trauma
- thromboembolism
- lactation (inadequate, suppression)
- medical disorders (diabetes mellitus, renal disease, cardiac disease)
- postnatal review
- contraception.

**Techniques for the control of haemorrhage:**

- manual removal of placenta
- bimanual compression of uterus
- exploration of genital tract
- cervical laceration (identification and repair)
- drug management
- balloon tamponade of uterus
- laparotomy including B-Lynch stitch
- radiological embolisation
- ligation of internal iliac arteries
- caesarean hysterectomy.

**Perineal surgery:**

- repair of episiotomy, second-, third-, fourth-degree tear

**Postpartum and postoperative complications, including pathophysiology, diagnosis, management and prognosis in puerperal psychological disorders (blues, depression), mood disorders, reactions to pregnancy loss.**

**Puerperal sepsis, mastitis, urinary tract infection.**

**Breast cancer.**

## NEONATAL PROBLEMS

**Knowledge criteria:**

- Sequelae of obstetric complications
- Recognition of normality
- Resuscitation of the newborn
- Common neonatal problems
- Feeding

**Clinical competency:**

- Appropriately manage immediate resuscitation of the neonate

**Professional skills and attitudes:**

- StratOG.net: Postpartum and Neonatal Problems e-tutorials
- Basic neonatal resuscitation
- Perinatal morbidity and mortality meetings
- Useful website
  - [www.nice.org.uk](http://www.nice.org.uk)

**Evidence/assessment:**

- MD – Sudan
- Logbook
- Neonatal resuscitation drill

***Details of knowledge criteria:(Neonatal Problems )***

**Sequelae of obstetric events:**

- antenatal
- intrapartum.

**Recognition of normality:**

- postnatal management
- clinical evaluation.

**Resuscitation of the newborn:**

- collapse
- primary apnoea
- secondary apnoea
- ventilation

- effect of maternal drugs
- cardiac massage
- umbilical catheterisation
- volume replacement
- temperature control
- acid/base status.

**Common problems (aetiology, management sequelae):**

- respiratory distress
- hyperbilirubinaemia
- infection
- seizures
- hypoglycaemia
- hypothermia
- heart disease
- intracranial haemorrhage
- necrotising enterocolitis
- the preterm infant
- the growth-restricted infant
- congenital anomalies
- syndromes
- cerebral palsy.

**Feeding:**

- breast (advantages, promotion, techniques)
- artificial (formulae, techniques).

# Module 4

## BASIC SURGICAL SKILLS

### **Learning outcomes:**

- To understand and demonstrate appropriate knowledge, skills and attitudes in relation to basic surgical skills.
- To understand and demonstrate appropriate knowledge, skills and attitudes in relation to postoperative care.

### **Knowledge criteria:**

- Legal issues around consent to surgical procedures, including consent of children, adults with incapacity and adults and children in emergency situations
- Name and mode of use of common surgical instruments and sutures
- Complications of surgery
- Regional anatomy and histology
- Commonly encountered infections, including an understanding of the principles of infection control
- Principles of nutrition, water, electrolyte and acid base balance and cell biology
- Appropriate use of blood and blood products
- General pathological principles

### **Clinical competency:**

- Interpret preoperative investigations
- Arrange preoperative management
- Recognise potential co-morbidity
- Obtain valid consent
- Explain procedures to patient
- Advise patient on postoperative course
- Within agreed level of competency for the procedure you may:
  - Choose appropriate operation
  - Exhibit technical competence
  - Make intraoperative decisions
  - Manage intraoperative problems
  - Communicate with colleagues and relatives

### **Professional skills and Attitudes:**

- Recognise the need for and initiate collaboration with other disciplines, before, during and after surgery
- Demonstrate the ability to select the operative procedure with due regard to degree of urgency, likely pathology and anticipated prognosis
- Have an awareness of the need to meet national targets
- Develop the ability to work under pressure and recognize own limitations
- Show the need to appreciate and recognise that decision making is a collaborative process between doctor and patient

**Training support:**

- Basic practical skills course
- Obtaining Valid Consent (RCOG ,October 2004)
- RCOG Consent Advice series
- DH website
- Local courses
- StratOG.net: The Obstetrician and Gynaecologist as a Professional. Ethical and legal issues e-tutorial

**Evidence/assessment:**

- Logbook
- Audit project
- MD – Sudan
- OSATS: opening and closing abdomen

***Details of Knowledge Criteria ( Basic Surgical Skills)***

- Legal issues around consent to surgical procedures, including consent of minors , adults with incapacity and adults and children in emergency situations.
- Name and mode of use of common surgical instruments.
- Knowledge of sutures and their appropriate use.
- Prevention and complications of surgery including:

- venous thromboembolism
- infection (wound, urinary tract, respiratory, intra-abdominal and pelvic)
- primary and secondary haemorrhage (intraoperative and postoperative).
- Relevant clinical anatomy.
- Relevant bones, joints, muscles, blood vessels, lymphatics, nerve supply and histology.
- Characteristics, recognition, prevention, eradication and pathological effects of all commonly encountered bacteria, viruses, Rickettsia, fungi, protozoa, parasites and toxins, including an understanding of the principles of infection control.
- Principles of nutrition, water, electrolyte and acid base balance and cell biology.
- Knowledge and awareness of anaesthesia: general anaesthetic, conscious sedation, regional and local.
- General pathological principles, including general, tissue and cellular responses to trauma, infection, inflammation, therapeutic intervention (especially by the use of irradiation, cytotoxic drugs and hormones), disturbances in blood flow, loss of body fluids, hyperplasia and neoplasia.
- Knowledge and awareness of use in complications of diathermy and other energy sources

## POSTOPERATIVE CARE



**Knowledge criteria:**

- General pathological principles of postoperative care
- Postoperative complications related to obstetric, gynaecological and non-gynaecological procedures
- Fluid / electrolyte balance
- Wound healing
- Late postoperative complications, including secondary haemorrhage

**Clinical competency:**

- Make appropriate postoperative plans for management, including investigation
- Conduct appropriate review of:
  - fluid / electrolyte balance
  - catheter
  - surgical drainage
  - sutures
- Manage complications, including wound, thromboembolism and infection
- Deal competently with the unexpected complications, e.g. bladder or ureteric injury
- Offer psychological support for patients and relatives
- Initiate management for secondary haemorrhage

**Professional skills and Attitudes:**

- Recognise the need and initiate collaboration with other disciplines
- Demonstrate the need for effective communication with other healthcare professionals
- Demonstrate the need for effective communication with patients and relatives
- Document the surgical procedure with appropriate notes
- Construct an appropriate discharge letter
- Recognise personal limitation and the need for appropriate referral

**Training support:**

- Practical skills in obstetrics and gynaecology course
- RCOG guidelines on thromboembolism
- StratOG.net: Surgical Procedures and Postoperative Care e-tutorials

**Evidence/assessment:**

- Morbidity and mortality meetings attended
- Audit project
- MD – Sudan
- Reflective practice ( A12 )

# Module 5

## SURGICAL PROCEDURES

### **Learning outcomes:**

- To understand and demonstrate appropriate knowledge, skills and attitudes in relation to surgical procedures.

### **Knowledge criteria:**

- Relevant basic sciences
- Knowledge of instruments and sutures

### **Clinical competency:**

- Marsupialisation of Bartholin's abscess
- Evacuation of uterus
- Diagnostic laparoscopy
- Sterilisation
- Polypectomy
- Diagnostic hysteroscopy
- Minor cervical procedures
- Excision of vulval lesions
- Laparotomy for ectopic pregnancy
- Ovarian cystectomy for benign disease
- Elective perineal adhesiolysis
- Myomectomy

### **Professional skills and Attitudes:**

- Have the knowledge to choose appropriate instruments, sutures, drains and catheters
- Know own limitations and when to seek help

- Demonstrate the use of diathermy, endoscopic and other equipment safely and efficiently
- Show evidence of thinking ahead during procedure
- Have the ability to alter the surgical procedure appropriately when necessary following consultation
- Demonstrate the ability to work effectively with other members of the theatre team, taking a leadership role where appropriate

**Training support:**

- Observation of, assisting and discussion with senior medical staff
- Useful websites:
  - [www.rcog.org.uk](http://www.rcog.org.uk)
  - [www.nice.org.uk](http://www.nice.org.uk)
  - [www.sign.ac.uk](http://www.sign.ac.uk)
- StratOG.net: Surgical Procedures and Postoperative Care e-tutorials

**Evidence/assessment:**

- OSATS: Diagnostic laparoscopy
- OSATS: Operative laparoscopy
- OSATS: Diagnostic Hysteroscopy
- Successful Patient Outcomes
- Logbook
- Reflective practice ( A12 )

# Module 6

## **GYNAECOLOGICAL PROBLEMS, PREGNANCY LOSS, CONTRACEPTION & INFERTILITY**

### **Learning outcomes:**

- To understand and demonstrate appropriate knowledge, skills and attitudes in relation to common gynaecological disorders.
- To understand paediatric and adolescent gynaecological disorders.
- To understand and to demonstrate appropriate knowledge, skills and attitudes in relation to early pregnancy loss.
- To understand and demonstrate appropriate knowledge, skills and attitudes in relation to contraception, the diagnosis and management of sexually transmitted infections including HIV and sexual dysfunction.
- Understand the need to respect women's rights, dignity and confidentiality whilst providing appropriate information and advice.
- To understand the issues and demonstrate appropriate knowledge, skills and attitudes in relation to subfertility.

## GYNAECOLOGICAL PROBLEMS

### **Knowledge criteria:**

■ To understand the epidemiology, aetiology, biological behaviour, pathophysiology, clinical characteristics, prognostic features and management of:

- Menstrual disorders
- Benign conditions of the genital tract
- Endocrine disorders
- Problems of the climacteric
- Pelvic pain
- Vaginal discharge
- Emergency gynaecology
- Congenital abnormalities of the genital tract
- Paediatric gynaecology
- Puberty

### **Clinical competency:**

- Diagnose, investigate and manage common gynaecological disorders
- Perform ultrasound scan to diagnose and facilitate appropriate management of women with common ovarian and uterine abnormalities
- Observe transvaginal ultrasound scanning and diagnosis of uterine fibroids and endometrial polyps
- Observe the diagnosis of polycystic ovaries and hydrosalpinges on ultrasound
- Observe the performance of saline sonohysterography
- Endometrial assessment
- Diagnostic hysteroscopy
- Diagnostic laparoscopy: staging of endometriosis

- Recognise the need for appropriate referral for more complex or detailed evaluation with ultrasound or other imaging techniques

### **Professional skills and Attitudes:**

- Demonstrate the ability to communicate prognosis and counsel women sensitively about the options available
- Have the necessary skills to explain the nature ,complications and adverse effects of medical and surgical treatments
- Demonstrate the ability to formulate and implement a plan of management and have the ability to modify this as necessary
- Recognise the need for appropriate referral for more complex or detailed evaluation with ultrasound or other imaging techniques
- Have the skills to liaise with colleagues in other disciplines where required
- Demonstrate an understanding of the use appropriate referral pathways and local protocols if abnormal findings suspected

### **Training support:**

- StratOG.net: Gynaecological Problems and Early Pregnancy Loss e-tutorials
- Supervised clinical sessions
- Specific courses and academic meetings
- Local and regional courses in paediatric gynaecological problems and problems of puberty
- Useful websites:
  - [www.nice.org.uk](http://www.nice.org.uk)
  - [www.rcog.org.uk](http://www.rcog.org.uk)
  - [www.sign.ac.uk](http://www.sign.ac.uk)

### **Evidence/assessment:**

- Logbook
- Reflective practice (A12)
- MD– Sudan
- Audit project
- Attitude Observation ( Form B1 )

- OSATS: Diagnostic laparoscopy

### ***Details of knowledge criteria :( Gynaecological Problems )***

#### **Menstrual disorders:**

- Menstrual irregularity
- Excessive menstrual loss
- Investigation of menstrual disorders
- Medical and surgical management of menstrual disorders.

#### **Fibroids.**

**Nonmenstrual bleeding (intermenstrual, postcoital).  
Premenstrual syndrome.**

#### **Problems of the climacteric:**

- Abnormal bleeding
- Postmenopausal bleeding
- Hormone replacement therapy
- Non hormonal therapy
- Osteopenia and osteoporosis
- Breast cancer in relation to the climacteric.

#### **Amenorrhoea and endocrine disorders:**

- Investigation and interpretation
- Hypothalamic/pituitary disorders
- Hyperprolactinaemia
- Premature ovarian failure
- Polycystic ovaries and polycystic ovary syndrome
- Other causes of hyperandrogenism
- Thyroid/adrenal disorders
- Autoimmune endocrine disease

#### **Congenital abnormalities of genital tract:**

- Ambiguous genitalia
- Imperforate hymen
- Vaginal septae
- Uterine anomalies
- Müllerian duct development
- Gonadal dysgenesis.



**Puberty:**

- Physiology and chronology
- Precocious puberty
- Delayed puberty
- Excessive menstrual loss.

**Benign conditions of the lower genital tract:**

■ **Vulva:**

- Pruritus vulvae
- Non-neoplastic cysts
- Non-neoplastic epithelial disorders
- Vulvodynia.

■ **Vagina:**

- Vaginal discharge (non-sexually transmitted causes)

■ **Pelvic pain:**

- Dysmenorrhoea
- Dyspareunia
- Endometriosis (staging, treatment)
- Pelvic inflammatory disease
- Non-gynaecological disorders.

■ **Ovary:**

- Benign ovarian neoplasms
- Functional ovarian cysts.

**Emergency gynaecology:**

- Pelvic inflammatory disease
- Bartholin's and vulval abscess
- Ovarian cyst accidents
- Acute vaginal bleeding outwith pregnancy
- Miscarriage and ectopic pregnancy

## EARLY PREGNANCY LOSS

### **Learning outcomes:**

- To understand and to demonstrate appropriate knowledge, skills and attitudes in relation to early pregnancy loss.

### **Knowledge criteria:**

- Epidemiology, aetiology, pathogenesis and clinical features of miscarriage
- Trophoblastic disease and ectopic pregnancy
- Medical management of ectopic pregnancy
- Indications and limitations of Investigations:
  - endocrine
  - anatomical
  - immunological
  - genetic
  - radiological
  - bacteriological
- Understanding of management options
- Prognosis after miscarriage and ectopic pregnancy
- Role and use of ultrasound in early pregnancy loss
- Anatomy and embryology
- Ultrasound examination :
  - Site of gestation
  - Sac(s) size
  - Yolk sac
  - Fetal pole(s)
  - Heart beat
- Principles of ultrasound examination including Doppler:
  - physics
  - safety
  - machine set-up
  - patient care

- principles of report writing
- benchmarking

### **Clinical competency:**

- Clinical assessment of miscarriage and ectopic pregnancy
- Awareness of ultrasonographic (transabdominal and transvaginal) and biochemical assessment of early pregnancy
- Communication of findings
- Appropriate referral for more complex or detailed evaluation with ultrasound or other imaging techniques
- Surgical, minimal access surgery and non-surgical management of miscarriage and ectopic by appropriate techniques
- Exhibit technical competence surgically and make appropriate operative decisions
- Awareness of role of transvaginal ultrasound scanning
- Be aware of ultrasound features of nonviable or early pregnancy failure (including ectopic pregnancy)
- Diagnose viable intrauterine pregnancy
- Record and interpret early pregnancy failure
- Recognise ectopic pregnancy/absence of intrauterine pregnancy
- Be aware of ultrasound features of a molar pregnancy
- Be aware of ultrasound features which will allow recognition of an intrauterine device in the presence of a pregnancy
- Failed intrauterine contraception

- Perform transabdominal early pregnancy assessment for viability only
- Determine gestational age by gestation sac size or crown-rump length
- Diagnose multiple pregnancy with appropriate referral for chorionicity
- Understand the principles of conducting a safe and appropriate ultrasound examination
- Use an ultrasound machine competently and independently

**See basic ultrasound module – Early pregnancy 8–12 weeks**

### **Professional skills and attitudes;**

- Demonstrates the ability to communicate effectively with patients and relatives
- Has the ability to break bad news and appreciate and describe the possible long term consequences for the woman in a sensitive manner
- Has the desired skills necessary to counsel patients in an acute and outpatient environment
- Demonstrates the ability to communicate findings to patients and other healthcare professionals
- Has the skills to work with other healthcare professionals to achieve better patient outcomes
- Has the ability to recognize limits of own competence and develop the skills to refer appropriately
- Respects patient dignity and privacy during intimate examinations
- Is aware of the need for a chaperone
- Is aware of health and safety issues when using imaging technology
- Demonstrates the ability to communicate within teams, and with patients

**Training support:**

- Basic Surgical Skills Course
- StratOG.net: Gynaecological Problems and Early Pregnancy Loss e-tutorials
- Ultrasound skills course
- Management of Early Pregnancy Loss (Green-Top Guideline, No. 25) October 2006
- Theoretical accredited course
- Supervised structured clinical learning sessions
- Supervised participation at an early pregnancy unit
- Observe transvaginal scanning
- Attendance at a gynaecology ultrasound clinic
- Personal study
- RCOG/RCR report 2005: Guidance on ultrasound procedures in early pregnancy
- Relevant green-top guidelines
- Course including both:
  - theory
  - practical demonstration of machine use and reporting

**Evidence/assessment:**

- Meetings attended
- Case reports
- Reflective practice (A12)
- Audit project
- MD – Sudan
- Certificate of course attendance
- OSATS: Uterine evacuation

**CONTRACEPTION, SEXUALLY  
TRANSMITTED INFECTIONS  
AND HIV, SEXUAL PROBLEMS**

**Learning outcomes:**

- To understand and demonstrate appropriate knowledge, skills and attitudes in relation to contraception , the diagnosis and management of sexually transmitted infections including HIV and sexual dysfunction.
- Understand the need to respect women's rights, dignity and confidentiality whilst providing appropriate information and advice.

**Knowledge criteria:**

- Reversible, irreversible and emergency contraception :
  - mode of action and efficacy
  - methods, indications, contraindications and complications
- Sexually transmitted infections including HIV/AIDS:
  - transmission, clinical features, management, transmission and prevention
- Chlamydia Screening
- Understand local care pathways for multi-agency working and cross referrals for individuals with sexual health needs
- Sexual problems:
  - anatomy and physiology of the human sexual response

- epidemiology, aetiology, pathogenesis, clinical features and prognosis of psychosexual/sexual problems

**Clinical competency:**

- Take a history in relation to:
  - contraceptive and sexual health needs and risk assessment
  - unplanned pregnancy
- Counsel about:
  - contraceptive options (reversible and irreversible)
  - unplanned pregnancy options
- Manage the following clinical situations:
  - emergency contraception
  - hormonal contraception
  - Insertion of intrauterine contraceptive device
- female sterilisation
- Network with other providers in multidisciplinary team, e.g:
  - counsellors
  - social workers
  - genitourinary medicine specialists
  - contraception specialists
  - primary care
  - police
- Recognise and manage the following:
  - common clinical presentations of STIs in the female patient, e.g. dysuria, discharge, genital ulcerations
  - clinical presentations of complications of common STIs, e.g. acute pelvic infection
- Perform appropriate microbiological investigations to investigate the common presentations of STIs
- Recognise and manage clinical presentations of non-STI genital infections, e.g. bacterial vaginosis, genital candidiasis
- Treat and arrange follow-up for women with STIs as local protocols
- Explain the principles of partner notification and epidemiological treatment for sexual contacts
- Perform an HIV risk assessment and discuss HIV transmission with women

- Give appropriate advice to an HIV-positive woman about interventions available to reduce vertical HIV transmission in pregnancy
- Perform an HIV pre-test discussion and provide appropriate management for positive and negative results
- Assess risk for hepatitis A/B/C infections and arrange HAV and HBV vaccination appropriately for at-risk groups according to local protocol
- Liaise effectively with local genitourinary medicine colleagues for effective multi-agency working
- Take a history from the couple – or individual- with a sexual/ psychosexual problem
- Recognise, counsel and plan initial management of sexual/psychosexual problems and know when to refer

### **Professional skills and Attitudes:**

- Demonstrates the ability to counsel women sensitively about their options and the associated sexual health issues
- Displays tact, empathy and concern
- Demonstrates the ability to listen actively and respects silences
- Understands the need to respect women's rights, dignity and confidentiality
- Is able to explain clearly and openly treatments, complications and adverse effects of drug treatment
- Demonstrates the ability to formulate and implement a management plan
- Demonstrates effective liaison with colleagues in other disciplines, clinical and nonclinical
- Understands the need to respect cultural and religious beliefs as well as sexual diversity
- Appreciates the importance of psychological factors for women and their partners
- Has an understanding of the psychosocial impact of STIs and living with HIV/AIDS, including the knowledge of the support systems available for patients
- Demonstrates the ability to promote healthy lifestyles

- Is aware of the Sudan Medical Council Guidance for Doctors for Objections to Abortions
- Is aware of the Sudan Medical Council Good Medical Practice and Duties of a Doctor publications and their implications for doctors in practice

### **Training support:**

- StratOG.net: Sexual and Reproductive Health e-tutorials
- Family Planning/genitourinary medicine sessions
- Faculty of Sexual and Reproductive Health Care Letter of Competence in Intrauterine Techniques (LoC IUT)
- Faculty of Sexual and Reproductive Health Care Letter of Competence in Subdermal Implants (LocSdi)
- Sexually Transmitted Infections course
- Use of training models
- SIGN guidelines
- Useful websites:
  - [www.rcog.org.uk](http://www.rcog.org.uk)
  - [www.nice.org.uk](http://www.nice.org.uk)
  - [www.ffprhc.org.uk](http://www.ffprhc.org.uk)
  - [www.medfash.org.uk](http://www.medfash.org.uk)
  - [www.bashh.org.uk](http://www.bashh.org.uk)
  - [www.baasart](http://www.baasart)
  - [www.lpms](http://www.lpms)

### **Evidence/assessment:**

- Direct Observation of Clinical Practice
- Mini CEX
- Logbook
- MD – Sudan
- Mini CbD
- Reflective practice (A12)
- Certificate of completion of Contraception training course

### ***Details of knowledge criteria: (Contraception, STDs, Sexual problems )***

#### **Fertility control methods:**

- Natural family planning (physical, Persona®).
- Barrier (condom: male and female, diaphragm, caps).



- Chemical.
- Hormonal (including pharmacodynamics and metabolic effects) oral, transdermal, subdermal, intramuscular, intrauterine.
- Male and female sterilisation.
- Intrauterine contraception, (copper-containing, progesterone-containing).
- Reversal of sterilisation.
- Postcoital methods (progestogen, intrauterine contraceptive devices).
- Advances in contraception (including male reversible).

### **Unplanned / unwanted pregnancy:**

- Contraceptive failure
  - method
  - iatrogenic
  - user.
- Non-use of contraception owing to, e.g:
  - social factors
  - cultural factors
  - sexual/domestic abuse
  - poor service access/delivery.
- Socio-economic consequences:
  - cycle of deprivation
  - population trends.

### **Sexually transmitted infections, including HIV/ AIDS:**

- Transmission.
- Clinical features.
- Detection.
- Prevention.
- Treatments.
- Test of cure.
- Contact tracing.
- Health advisors.
- Genitourinary medicine services.
- Screening programmes.
- Specific conditions:
  - Chlamydia.
  - HIV.
  - Parasitic infections.

- Fungal infections.
- Bacterial infections.
- Protozoal infections.
- Viral infections.

## **Population trends.**

### **Sexual problems:**

- Anatomy and physiology of human sexual response.
- Psychogenic aetiology and presentation of common sexual problems such as loss of sexual interest and arousal, vaginismus, an orgasmia.
- Effect of age, cultural influences, illness and drugs on sexual behaviour and performance.
- Gender dysphoria.
- Principles of psychosexual counselling.
- Sexual problems in special needs groups such as physical and learning disability.
- Covert presentations of psychosexual problems and childhood sexual abuse.
- Referral pathways to local expertise in the field of psychosexual medicine and sexual dysfunction

## **SUB-FERTILITY**

### **Learning outcomes:**

- To understand the issues and demonstrate appropriate knowledge, skills and attitudes in relation to subfertility.

### **Knowledge criteria:**

- Epidemiology, aetiology, pathogenesis, clinical features, treatment and prognosis of male and female subfertility
- Indications, limitations and interpretation of investigations:
  - endocrine measurements (male and female)
  - semen analysis
  - ultrasound

- other imaging techniques
- genetic analysis
- operative procedures
- Indications, techniques, limitations and complications of surgery in relation to:
  - male and female subfertility
  - endometriosis
  - developmental disorders
- Indications, limitations and complications of assisted reproduction techniques:
  - ovulation induction
  - IVF and ICSI
- Legal and ethical issues

### **Clinical competency:**

- Take history and examine a couple presenting with subfertility
- Arrange basic investigations
- Counsel couples about diagnosis and management options
- Perform the following:
  - diagnostic laparoscopy
  - staging of endometriosis
  - assessment of tubal patency
  - diagnostic hysteroscopy

### **Professional skills and Attitudes:**

- Shows an appreciation of the importance of psychological factors for women and their partners
- Demonstrates respect for woman's dignity and confidentiality
- Demonstrates the ability to deal sensitively with issues relating to the welfare of the child
- Demonstrates the need to liaise effectively with colleagues in other disciplines, clinical and nonclinical

### **Training support:**

- Appropriate postgraduate education courses
- Multidisciplinary and clinical team meetings

- StratOG.net: Subfertility e-tutorials
- Subfertility clinics
- Assisted reproduction sessions
- Useful websites:
  - [www.nice.org.uk](http://www.nice.org.uk)
  - [www.hfea.gov.uk](http://www.hfea.gov.uk)

### **Evidence/assessment:**

- Logbook
- Reflective practice (A12)
- Case reports
- Audit projects
- OSATS: Diagnostic laparoscopy
- MD - Sudan

### ***Details of knowledge criteria: (Sub-fertility)***

### **Epidemiology, aetiology, pathogenesis, clinical features, treatment and prognosis of male and female subfertility:**

- Female (ovulatory disorders, tubal disorders, endometriosis, cervical and uterine factors, genetic and developmental disorders).
- Male (structural, endocrine, pharmacological, infectious, lifestyle, genetic).
- Unexplained infertility.
- Long-term sequelae of cancer treatment.
- Sterilisation regret.

### **Indications, limitations and interpretation of investigative techniques:**

- Semen analysis.
- Endocrine assessment :
  - assessment of ovulation
  - assessment of the subfertile male
  - amenorrhoea and oligomenorrhoea
  - polycystic ovary syndrome
  - hyperprolactinaemia
  - thyroid / adrenal function

- gonadal failure.
- Genetic analysis:
  - chromosome analysis, e.g. sex chromosome abnormalities
  - Genetic abnormalities, e.g. cystic fibrosis.

**Ultrasound:**

- Normal uterine and ovarian morphology.
- Follicular tracking
- Polycystic ovaries.
- Tubal patency.

**Other imaging techniques:**

- Hysterosalpingography.
- Pituitary imaging.
- Computed tomography.
- Magnetic resonance imaging.

**Operative investigative procedures:**

- Diagnostic laparoscopy.
- Diagnostic hysteroscopy.

**Indications, limitations, techniques and complications of:**

- Ovulation induction (clomifene, gonadotrophins, gonadotrophin-releasing hormone).
- Other medical interventions (e.g. metformin, dopaminergic drugs).
- Intrauterine insemination.
- In vitro fertilisation.
- Intracytoplasmic sperm injection.
- Surgical sperm recovery.

**Legal and ethical issues:**

- Welfare of the child.
- Embryo storage.
- Gamete donation.
- Surrogacy.

**Indications, limitations and complications of surgery in relation to male and female infertility:**

- Reversal of sterilisation and vasectomy.
- Adhesiolysis.

- Salpingostomy.
- Surgical management of endometriosis.
- Ovarian diathermy.
- Myomectomy.
- Hysteroscopic surgery.
- Varicocoele.

# Module 7

## TEACHING, DATA HANDLING, AUDIT, EVIDENCE-BASED MEDICINE & RISK MANAGEMENT

### Teaching, Appraisal and Assessment

#### Learning outcomes:

- To understand and demonstrate the knowledge, skills and attitudes to provide appropriate teaching, learning opportunities, appraisal, assessment and mentorship.

- To acquire the knowledge and skills to cope with and to understand the ethical and legal issues which occur during the management of obstetric and gynaecological patients.

## TEACHING

### **Knowledge criteria:**

- Understand the principles of adult learning
- Understand the skills and practices of a competent teacher
- Identify learner needs and learning styles
- Understand the principles of giving feedback
- Identify teaching strategies appropriate to adult learning
- Identify of learning principles ,needs and styles
- Understand the principles of evaluation

### **Clinical competency:**

- Facilitate the learning process
- Use varied teaching strategies appropriate to audience and context (including one-to-one, small and large groups, formal lectures)
- Use of audiovisual aids effectively
- Prepare teaching session
- Teach in small (< 10) and large groups (> 20) and 'at the bedside'
- Teach some practical procedures (including ultrasound)

### **Professional skills and Attitudes:**

- Demonstrate the ability to set objectives and structure of educational session
- Demonstrate the ability to present a teaching session with audience participation
- Demonstrate the ability to achieve rapport
- Demonstrate the skills to evaluate a training event and act upon feedback
- Demonstrate the ability to communicate effectively
- Demonstrate the ability to teach on various topic(s) using appropriate teaching resources

- Participate in the organization of a programme of postgraduate education, e.g. short course or multidisciplinary meeting

**Training support:**

- Local and regional Courses in presentation skills
- StratOG.net: The Obstetrician and Gynaecologist as a Teacher and Researcher. Teaching e-tutorial
- Observation of and discussion with senior medical staff
- Appropriate postgraduate courses

**Evidence/assessment:**

- Logbook
- Feedback summaries
- Attitude Observation ( Form B1 )

## APPRAISAL

**Knowledge criteria:**

- Understand the difference between appraisal and assessment
- Understand the importance of appraisal and the qualities of a good appraiser
- Know the principles of appraisal and the structure of the appraisal interview
- Understand the principles of mentoring

**Clinical competency:**

- Perform effective appraisal
- Assess objectivity in appraisal and use of methodical, structured approach



### **Professional skills and Attitudes:**

- Acknowledge and respect cultural diversity
- Demonstrate the ability to deal with conflict
- Have the ability to deal with a trainee in difficulty and the difficult trainee
- Be prepared to act as a mentor (for RCOG definition see [www.rcog.org.uk](http://www.rcog.org.uk))

### **Training support:**

- StratOG.net: The Obstetrician and Gynaecologist as a Professional Appraisal, Mentoring and Reflective practice e-tutorials
- StratOG.net: The Obstetrician and Gynaecologist as a Teacher and Researcher. Assessment e-tutorial
- Local educational session
- Appraisal and assessment

### **Evidence/assessment:**

- Logbook

## **ASSESSMENT**

### **Knowledge criteria:**

- Understand the difference between assessment and appraisal
- Understand the reasons for assessment
- Know different assessment methods and when to use them appropriately
- Be aware of the differences between formative and summative assessment

**Clinical competency:**

- Perform appropriate assessments
- Use appropriate assessment methods

**Professional skills and Attitudes:**

- Have the ability to assess performance honestly and objectively
- Acquire the necessary skills to give constructive and effective feedback

**Training support:**

- Training the Trainers Course
- Local educational session
- StratOG.net: The Obstetrician and Gynaecologist as a Teacher and Researcher. Assessment e-tutorial

**Evidence/assessment:**

- Logbook

## **INFORMATION TECHNOLOGY, CLINICAL GOVERNANCE AND RESEARCH**

**Learning outcomes:**

- To understand and demonstrate appropriate knowledge, skills and attitudes in the use and management of health information.
- To have an understanding of the context, meaning and implementation of clinical standards and governance.

- To know and understand the audit cycle and to have knowledge of research methodology.

## **USE OF INFORMATION TECHNOLOGY**

### **Knowledge criteria:**

- Understand the principles of storage, retrieval, analysis and presentation of data
- Understand the effective use of computing systems
- Understand the range of uses of clinical data and its effective interpretation
- Be aware of the confidentiality issues

### **Clinical competency:**

- Retrieve and use data recorded in clinical systems
- Demonstrate appropriate use of IT for patient care and for personal development
- Demonstrate competent use of databases, word processing techniques, statistics programmes and electronic mail
- Undertake searches and access web sites, and health-related databases
- Present data in an understandable manner

### **Professional skills and Attitudes:**

- Demonstrate the ability to apply IT solutions in the management of patients
- Adopt a proactive and enquiring attitude to new technology

### **Training support:**

- IT courses
- StratOG.net: The Obstetrician and Gynaecologist as a Teacher and Researcher. Data handling, Research and Assessing evidence e-tutorials

## CLINICAL GOVERNANCE: AUDIT

### **Knowledge criteria:**

- Understand the audit cycle
- Understand clinical effectiveness:
  - Principles of evidence based practice
  - Types of clinical trial and evidence classification
  - Grades of recommendation
- Understand guidelines and integrated care pathways:

- Formulation
- Advantages and disadvantages

### **Clinical competency:**

- Perform an audit exercise:
  - Define standard
  - Prepare project
  - Collate data
  - Formulate policy
- Repeat audit cycle; perform clinical audit:
  - Define standard based on evidence
  - Prepare project and collate data
  - Re-audit and close audit loop
  - Formulate policy
- Develop and implement a clinical guideline:
  - Purpose and scope
  - Identify and classify evidence
  - Formulate recommendations
  - Identify auditable standards

### **Professional skills and Attitudes:**

- Show how the use of audit can improve clinical practice

### **Training support:**

- Understanding Audit (RCOG; October2003)
- Principles for best practice in audit (NICE)
- Ability to perform a clinical audit
- Ability to develop and implement a clinical guideline
- StratOG.net: The Obstetrician and Gynaecologist as a Professional. Clinical governance e-tutorial

### **Evidence/assessment:**

- Presentation at audit meeting
- Logbook
- MD – Sudan

## CLINICAL GOVERNANCE: CLINICAL STANDARDS

### **Knowledge criteria:**

- Understand the definitions and relevance of levels of evidence
- Understand the development and application of clinical guidelines, integrated care pathways and protocols
- Understand the organizational framework for clinical governance at local, regional and national levels
- Understand standards, e.g. NSF, NICE, RCOG guideline

### **Clinical competency:**

- Review evidence
- Evaluate guidelines
- Prepare a protocol
- Critically appraise publications and evaluate multicentre trials
- Critically evaluate a care pathway

### **Professional skills and Attitudes:**

- Have the skills to be able to discuss the relevance of evidence in the clinical situation
- Acknowledge and show regard for individual patient needs when using guidelines
- Be aware of advantages and disadvantages of guide-lines and protocols, and use them Appropriately

### **Training support:**

- Searching for Evidence (RCOG, October 2001)
- Ability to practice evidence-based medicine
- StratOG.net: The Obstetrician and Gynaecologist as a Professional. Clinical governance e-tutorial

### **Evidence/assessment:**

- Logbook
- MD – Sudan
- Presentation to colleagues

## CLINICAL GOVERNANCE: RISK MANAGEMENT

### **Knowledge criteria:**

- Know the principles of risk management and their relationship to clinical governance
- Understand complaints procedures and risk management:
  - incidents/near miss reporting
  - complaints management
  - litigation and claims management
- Patient/user involvement

### **Clinical competency:**

- Report and review critical incidents



- Discuss risks with patients
- Document adverse incidents
- Prepare a report relating to an adverse incident
- Participate in risk management
- Investigate a critical incident:
  - Assess risk
  - Formulate recommendations
  - Debrief staff

**Professional skills and Attitudes:**

- Demonstrate respect and accept patients' views and choices
- Display eagerness to use evidence in support of patient care when evaluating risk
- Show probity by being truthful and be able to admit error to patients, relatives and colleagues
- Demonstrate the ability to act constructively when a complaint is made

**Training support:**

- Clinical Risk Management for Obstetricians and Gynaecologists (RCOG, January 2001)
- Sudan Medical Council: Good Medical Practice
- Clinical Governance Bulletin series (DH funded)  
[www.clinicalgovernance.com](http://www.clinicalgovernance.com)
- StratOG.net: The Obstetrician and Gynaecologist as a Professional. Clinical governance e-tutorial

**Evidence/assessment:**

- Logbook
- MD – Sudan
- Presentation at risk management meetings

## RESEARCH

### **Knowledge criteria:**

- Understand the difference between audit and research
- Understand how to plan and analyse a research project
- Understand statistical methods
- Know the principles of research ethics and conflicts of interest

### **Clinical competency:**

- Appraise a scientific paper
- Evaluate a multicentre trial
- Understand the principles of critical reading and undertake critical review of scientific literature

### **Professional skills and Attitudes:**

- Have the ability to be receptive to innovations resulting from research publications
- Acquire skills to put research findings into practice
- Be aware of the issues underlying plagiarism and how this relates to the duties of a doctor

**Training support:**

- Local and RCOG courses
- StratOG.net: The Obstetrician and Gynaecologist as a Teacher and Researcher e-tutorials
- Introduction to Research Methodology, 2nd edition (RCOG Press, 2007)

**Evidence/assessment:**

- Logbook
- MD – Sudan
- Presentations at journal club meetings
- Publications

## **PATIENT PUBLIC INVOLVEMENT**

**Knowledge criteria:**

- Understand the principles of Patient Public Involvement

**Clinical competency:**

- Undertake a project on Patient Public Involvement

**Professional skills and Attitudes:**

- Practice patient-centred care at all times
- Involve patient and carers in decision making
- Demonstrate skill in information giving

**Training support:**

- Local courses

**Evidence/assessment:**

- Observation of clinical practice

# Module 8

## ONCOLOGY, UROGYNAECOLOGY, AND PELVIC FLOOR PROBLEMS

### Oncology

**Learning outcomes:**

- To understand and demonstrate appropriate knowledge, skills and attitudes in relation to gynaecological oncology.

**Knowledge criteria:**

■ Epidemiology, aetiology, diagnosis, prevention, screening, management, prognosis, complications and anatomical considerations of premalignant and malignant conditions of:

- vulva
- vagina
- cervix
- uterus
- fallopian tube
- ovary

■ FIGO classifications for gynaecological tumours

■ Palliative and terminal care

■ Relief of symptoms

■ Community support roles

■ Indications and limitations in relation to screening and investigative techniques:

- cytology
- colposcopy
- gastrointestinal endoscopy
- minor procedures

■ Diagnostic imaging

■ Indications, techniques, complications and outcomes of:

- oncological surgery
- radiotherapy
- chemotherapy

### **Clinical competency:**

■ Counsel about cervical cytology reports

■ Observe cervical colposcopy

■ Recognise, counsel and plan initial management of premalignant conditions of:

- cervix
- endometrium
- vulva

■ Recognise, counsel and plan initial management of carcinoma of:

- cervix
- endometrium
- ovary

- vulva

### **Professional skills and Attitudes:**

- Shows empathy with patients
- Recognises the importance of psychological factors for women and their families
- Demonstrates respect for the patient's dignity and confidentiality
- Has the ability to explain clearly and openly treatments, complications and adverse effects of drug treatment, chemo- and radiotherapy in language appropriate for the patient
- Deals sensitively with issues regarding palliative care and death
- Is aware of the 'End of Life' policy
- Demonstrates effectiveness in liaising with colleagues in other disciplines, clinical and non-clinical
- Demonstrates an awareness of cultural and religious issues, especially with respect to death and burial practices

### **Training support:**

- Appropriate postgraduate education courses
- Multidisciplinary and clinical team meetings
- StratOG.net: Gynaecological Oncology e-tutorials
- The Obstetrician & Gynaecologist journal
- Palliative care course or sessions (including in hospice)
- Breaking bad news course
- Basic colposcopy course
- Colposcopy sessions
- Useful websites:
  - [www.nice.org.uk](http://www.nice.org.uk)
  - [www.rcog.org.uk](http://www.rcog.org.uk)
  - [www.sign.ac.uk](http://www.sign.ac.uk)
  - [www.show.scot.nhs.uk/spcerh](http://www.show.scot.nhs.uk/spcerh)

### **Evidence/assessment:**

- Logbook
- Reflective practice (A12)
- MD – Sudan

- Case reports
- Audit projects
- Meetings attended

***Details of knowledge criteria: ( Oncology )***

**Epidemiology, aetiology, diagnosis, prevention, screening, management, prognosis, complications and anatomical considerations of premalignant and malignant conditions of:**

- Vulva:
  - preclinical phase of invasive carcinoma
  - Paget's disease
  - basal cell carcinoma
  - squamous cell carcinoma
  - malignant melanoma
  - sarcoma
- Cervix:
  - human papilloma virus screening
  - preclinical phase of invasive squamous cell carcinoma
  - adenocarcinoma in situ
  - squamous cell carcinoma
  - adenocarcinoma
  - sarcoma
  - metastatic tumours
- Uterus:
  - intraendometrial adenocarcinoma
  - adenocarcinoma
  - adenosquamous carcinoma
  - sarcoma
  - leiomyosarcoma
  - haemangiopericytomata
  - trophoblastic disease, hydatiform mole (complete, partial, invasive)
- Ovary:
  - epithelial tumours
  - germ cell tumours
  - sex chord stromal tumours
  - gonadoblastoma
  - mesonephroma

- metastatic carcinoma
- Palliative and terminal care:
  - relief of symptoms
  - pharmacological
  - alternative therapies
  - community support roles:
    - general practitioner
    - district nurse
    - family
    - religion
    - community services
- Hospice care
- Indications and limitations of screening and investigative techniques:
  - cytology:
    - cervical
    - other (endometrial, vaginal and peritoneal)
  - colposcopy:
    - cervix
    - vagina
    - vulva
- Minor procedures:
  - directed cervical biopsy
  - cone biopsy of cervix
  - endocervical curettage
- Diagnostic imaging:
  - radiograised tomography (head, body)
  - ultrasonography:
    - pelvis
    - abdomen
    - retroperitoneal masses
    - peripheral vascular thrombosis
  - magnetic resonance imaging:
    - pelvis
    - abdomen
    - other
- Indications, techniques, complications, and outcomes of:
  - oncological surgery:
    - gynaecological
    - radical hysterectomy



- pelvic lymphadenectomy
- radical vulvectomy
- vaginal reconstruction
- pelvic exenteration
- feeding jejunostomy / gastrotomy
- urinary tract:
  - ureter (ureteroneocystostomy, end-to-end ureteral anastomosis)
  - conduits (ileum, transverse colon, sigmoid colon)
  - repair of vesicovaginal fistulae
  - hysteroscopy
  - endometrial curettage
  - vulval biopsy
  - needle biopsies (transvaginal, transabdominal, lung, live, other)
  - nodal biopsies (pelvic, abdominal, other)
  - open biopsies
- gastrointestinal:
  - resection
  - reanastomosis
  - colostomy
- Radiotherapy:
  - therapeutic methods:
    - interstitial
    - intracavity
    - external
  - complications:
    - gastrointestinal tract
    - urinary tract
    - skin
    - bone marrow
    - kidneys
    - liver
    - central nervous system
  - Chemotherapy:
    - drug agents
    - adverse effects
    - monitoring

## UROGYNÆCOLOGY AND PELVIC FLOOR PROBLEMS

### **Learning outcomes:**

■ To understand and demonstrate appropriate knowledge, skills and attitudes in relation to urogynaecology and pelvic floor problems.

### **Knowledge criteria:**

- Anatomy, physiology and pathophysiology of:
  - pelvic floor
  - urinary tract
- Epidemiology, aetiology, characteristics and prognosis of:
  - urinary and faecal incontinence
  - urogenital prolapse

- urinary infection
- lower urinary tract disorders
- urinary disorders associated with other conditions
- Indications and limitations of investigations:
  - microbiological examination of urine
  - quantification of urine loss
  - urodynamic investigations
  - videocystourethro-graphy
  - urethrocystoscopy
  - imaging
- Indications, techniques, limitations and complications of treatment:
  - non-surgical
  - drug
  - surgical

### **Clinical competency:**

- Take a urogynaecological history
- Interpret investigations
- Assessment and non-surgical management of uterovaginal prolapse
- Treatment of acute bladder voiding disorder
- Counsel and plan initial management of overactive bladder symptoms and stress urinary incontinence
- Direct supervision:
  - Primary repair of anterior and posterior prolapse
  - vaginal hysterectomy
- Be aware of the national continence policy
- Observe procedure:
  - minimally invasive slings

### **Professional skills and Attitudes:**

- Shows empathy with patients
- Appreciate the importance of psychological factors for patients
- Demonstrates respect for patient's dignity and confidentiality
- Has the ability to explain clearly and openly treatments, complications and adverse effects of drug and surgical treatments

- Demonstrates the need to deal sensitively with issues regarding incontinence
- Has the skills to liaise effectively with colleagues in other disciplines, clinical and non-clinical

**Training support:**

- Local and regional courses
- Multidisciplinary and clinical team meetings
- StratOG.net: Urogynaecology and Pelvic Floor Problems e-tutorials
- The Obstetrician & Gynaecologist journal
- Urodynamic sessions
- Useful websites:
  - [www.nice.org.uk](http://www.nice.org.uk)
  - [www.rcog.org.uk](http://www.rcog.org.uk)
  - [www.sign.ac.uk](http://www.sign.ac.uk)
  - [www.show.scot.nhs.uk/spcerh](http://www.show.scot.nhs.uk/spcerh)

**Evidence/assessment:**

- Logbook
- Reflective practice (A12)
- MD - Sudan
- Case reports
- Meetings attended
- Audit projects
- Certificate of completion of Urodynamic course

***Details of knowledge criteria:(Urogynaecology and Pelvic Floor problems)***

**Epidemiology, aetiology, characteristics and prognosis of:**

- Urinary and faecal incontinence:
  - urodynamic stress incontinence
  - detrusor overactivity
  - voiding disorders and urinary retention
  - urinary frequency and urgency
- Lower urinary tract disorders:
  - urethral disorders
  - pain

- fistulae
- effects of radical pelvic surgery
- effects of irradiation
- Urinary disorders associated with other conditions:
  - pregnancy
  - gynaecological pathology
  - elderly patients
  - neurological conditions

### **Indications and limitations of investigations:**

- Urodynamic investigations:
  - voiding charts
  - ambulatory monitoring
  - urodynamic equipment
  - uroflowmetry
  - standard subtracted cystometry
- Imaging:
  - upper urinary tract
  - lower urinary tract
  - pelvic floor

### **Indications, techniques, limitations and complications of treatment:**

- Non-surgical:
  - pads and garments
  - bladder retraining
  - pelvic floor exercises
  - self-catheterisation
  - long-term indwelling catheterisation
  - community care
- Drug:
  - anticholinergics
  - anti-muscarinic
  - alpha blockers
  - antidepressants
  - estrogens
- Surgical:
  - urethral dilatation

- urethrocystoscopy
- supra pubic catheterisation
- periurethral injectables
- anterior repair
- vaginal hysterectomy
- vaginal repair of genital tract prolapse
- sling procedures
- colposuspension
- repair of recurrent prolapse
- fistula repair
- urinary diversion
- Injectables

## MANDATORY TRAINING COURSES FOR EACH MODULE AND THE RELEVANT SHIFT

| No | Course Title  | Shift | Module |
|----|---|-------|--------|
| 1  | At least 5 days course, including:<br>Emergency obstetrics & neonatal care (EMONC)<br>And basic surgical skills | 1     | 3      |
| 2  | At least 3 days course including:<br>Clinical: history & examinations Obs &                                     | 2     | 1      |

|   |   |   |   |
|---|---|---|---|
|   | Gynae   |   |   |
|   | Communication skills.   |   |   |
|   | Breaking bad news.  |   |   |
|   | Counseling after perinatal losses   |   |   |
|   | Communication in an emergency<br>(eclampsia, obs collapse, shoulder<br>dystocia, massive Hge) |   |   |
|   |   |   |   |
| 3 | At least 2 days course:   | 2 | 6 |
|   | Contraception training course.  |   |   |
|   |   |   |   |
| 4 | At least 1 day course:  | 2 | 2 |
|   | CTG interpretation.   |   |   |
| 5 | At least 5 days course, including:  | 3 | 7 |
|   | Presentational skills.  |   |   |
|   | Use of IT system.   |   |   |
|   | Audit.  |   |   |
|   | Research.   |   |   |
|   | Clinical standard.  |   |   |
|   | Clinical risk management.   |   |   |

| No. | Course Title                | Shift | Module |
|-----|-----------------------------|-------|--------|
| 6   | At least 6 days course:     | 4     | 2      |
|     | Basic Obstetric Ultrasound. |       |        |
|     |                             |       |        |

|    |  |   |   |
|----|--|---|---|
| 7  | At least 2 days course:<br>Basic urodynamics.  | 4 | 8 |
| 8  | At least 2 days course, including:<br>Paediatric Gynaecological problems.<br>Problems of puberty.<br>Rape. | 5 | 6 |
| 9  | At least 2 days course, including:<br>Assisted reproduction.<br>Psychosexual problems.                     | 5 | 6 |
| 10 | At least 3 days course:<br>Laparoscopy (hand – on).  | 6 | 5 |
| 11 | At least 2 days course:<br>Training in palliative care.  | 6 | 8 |

## TOTAL MANDATORY COURSES IN EACH MODULE/SHIFT

| Module<br>Number | Shift Number |   |   |   |   |   |   |   | Total<br>courses in<br>each |
|------------------|--------------|---|---|---|---|---|---|---|-----------------------------|
|                  | 1            | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                             |



|                            |   |   |   |   |   |   |   |   | module |
|----------------------------|---|---|---|---|---|---|---|---|--------|
| 1                          |   | 1 |   |   |   |   |   |   | 1      |
| 2                          |   | 1 |   | 1 |   |   |   |   | 2      |
| 3                          | 1 |   |   |   |   |   |   |   | 1      |
| 4                          |   |   |   |   |   |   |   |   | 1      |
| 5                          |   |   |   |   |   | 1 |   |   | 1      |
| 6                          |   | 1 |   |   | 2 |   |   |   | 3      |
| 7                          |   |   | 1 |   |   |   |   |   | 1      |
| 8                          |   |   |   | 1 |   | 1 |   |   | 2      |
| Total courses in the shift | 1 | 3 | 1 | 2 | 2 | 2 | 0 | 0 | 12     |

### 6.3 The residency programme:

1. **Registrar Career: (four years)**
  1. **Core Logbook: (the first 3 years)**

The logbook is divided into modules for ease of reference but is not intended that modules should be completed in isolation. You will acquire skills at different times depending upon the opportunities provided by each clinical shift. By the end of core training (end of shift 6), you must have completed all of the skills targets to the level indicated in the logbook.

1. There are 8 modules which make up the content of the training program.
2. Each module is laid out in the same manner.
3. The title and number of the module appear at the top of each page.

4. The skill targets to be achieved should be signed off by your trainer. The shaded boxes indicate the shift during which competence level 2 should be achieved.
5. Each shift when completed has to be signed off by the educational supervisor.

## Contents of the core logbook:

**Module 1:** Communication & Basic Clinical Skills.

**Module 2:** Antenatal Care, Obstetric Ultrasound, & Maternal Complications of pregnancy.

**Module 3:** Management of Labour, Delivery, & Postpartum Problems.

**Module 4:** Basic Surgical Skills.

**Module 5:** Surgical Procedures.

**Module 6:** Gynae. Problems, Pregnancy Loss, Contraception, Infertility, & Psychosexual Problems.

**Module 7:** Teaching, Data Handling, Audit, Research, Evidence-based Medicine & Risk Management.

**Module 8:** Oncology & Urogynaecology and Pelvic Floor Problems.

## TOTAL SKILLS TO BE ACHIEVED IN EACH MODULE/SHIFT

| Module | Shift Number | Total Skills |
|--------|--------------|--------------|
|--------|--------------|--------------|

| Number                     | 1  | 2  | 3  | 4  | 5  | 6 | 7 | 8 | in each module |
|----------------------------|----|----|----|----|----|---|---|---|----------------|
| 1                          | 15 | 5  | 0  | 0  | 0  | 0 | 0 | 0 | 20             |
| 2                          | 11 | 17 | 26 | 4  | 0  | 0 | 0 | 0 | 58             |
| 3                          | 7  | 24 | 8  | 0  | 0  | 0 | 1 | 0 | 40             |
| 4                          | 10 | 13 | 0  | 0  | 0  | 0 | 0 | 0 | 23             |
| 5                          | 1  | 2  | 3  | 5  | 4  | 0 | 1 | 3 | 19             |
| 6                          | 5  | 4  | 9  | 12 | 6  | 0 | 1 | 0 | 37             |
| 7                          | 0  | 3  | 16 | 5  | 0  | 0 | 0 | 0 | 24             |
| 8                          | 0  | 0  | 5  | 1  | 18 | 0 | 0 | 1 | 25             |
| Total skills in the shifts | 49 | 68 | 67 | 27 | 28 | 0 | 3 | 4 | 246            |

## 2. **Advanced Training Modules: (the 4th year)**

It is now relatively unusual for an individual consultant to profess equal expertise across the entire spectrum of clinical practice in obstetrics & gynaecology. It is increasingly common to have developed expertise in one or more areas of clinical practice and, indeed, posts are now being advertised seeking appropriate specialized expertise. Hitherto, the acquisition of such special skills has been somewhat haphazard and this has led, on occasions, to

adverse clinical outcomes when appropriate skills were lacking.

The SMBS has recognized the need to formalize training in these areas to some extent and a number of special skills programmes are being developed.

It is essential that trainees in obstetrics & gynaecology have opportunities to acquire such skills before the completion of training.

The most appropriate time for this training would be following the completion of core training by the end of shift 6 (i.e in shift 7&8).

Suitable training would usually be undertaken flexibly, so that it would be possible for trainees to continue to develop their core competencies by experiential learning.

## **ADVANCED TRAINING SKILLS MODULES**

1. Acute gynaecology and early pregnancy (EPAU).
2. Advanced antenatal practice (MDU).
3. Advanced labour ward practice.
4. Labour ward lead.

5. Maternal medicine.
6. Fetal medicine.
7. Benign abdominal surgery.
8. Benign vaginal surgery.
9. Intermediate ultrasound training.
10. Benign gynae. Surgery: Laparoscopy.
11. Benign gynae. Surgery: Hysteroscopy.
12. Colposcopy.
13. Urogynaecology and urodynamic.
14. Sexual health and contraception.
15. Menopause.
16. Subfertility and reproductive endocrinology.
17. Assisted reproduction.
18. Pediatric and adolescent gynaecology.
19. Vulval disease.
20. Gynae. Oncology.
21. Medical education.

## **7. METHODS OF TEACHING AND TRAINING**

### **7.1 Lectures, Seminars, Tutorials and Symposia:**

- It is recommended that, in addition to day-to-day education in the clinical setting, regular weekly

education sessions should be held in protected time in individual hospitals or groups of hospitals.

- In addition, less frequent but regular educational meetings organized by the **Training Center** on a regular basis occurring monthly or two monthly, are recommended. These meeting might include invited outside speakers, symposia, debates ect.
- **Training Centers** should have **Educational Committees** including training center tutor, educational supervisors, and trainees. They should meet every 2 to 3 months to organize, review and audit educational sessions and attendance.
- **Hospitals** should have **Educational Sub-committees** including Education Supervisors and Trainees dedicated to education programme.
- There should be much greater consultant involvement in educational sessions. It is recommended that each educational session be chaired by a consultant and that consultants should make every effort to be present when an area of their particular interest is involved. Trainees find that educational sessions more fruitful where consultants are present. Many of these educational sessions could be integrated with **CPD**.
- A detailed register of attendance should be kept of all educational sessions and trainees should attend **75%** of eligible sessions. Failure to maintain 75% attendance may count against a trainee in appraisal and assessment and detract from their priority in seeking a special skills module in year 5.
- Trainees should actively participate in the organization of educational sessions.
- Every encouragement should be given to develop individual and distance learning via computer assisted learning, video conferencing and the internet. Training Center Tutors should be alert to electronic developments that may enhance the delivery of education.
- Training Centers will help to promote the establishment of a national forum to develop and bring together educational ideas in order to develop a national curriculum.

**7.2 Trainee portfolio logbook:**

Core logbook and advanced skills modules.

**7.3 Courses:**

- The core training Mandatory Courses
- The advanced training Theoretical Courses.
- Other local, national and international courses.

**7.4 Conferences:**

Local, national and international

**7.5 Self-directed learning**

**7.6 e-learning**

**7.7 Problem based learning**

**7.8 Clinical rounds**

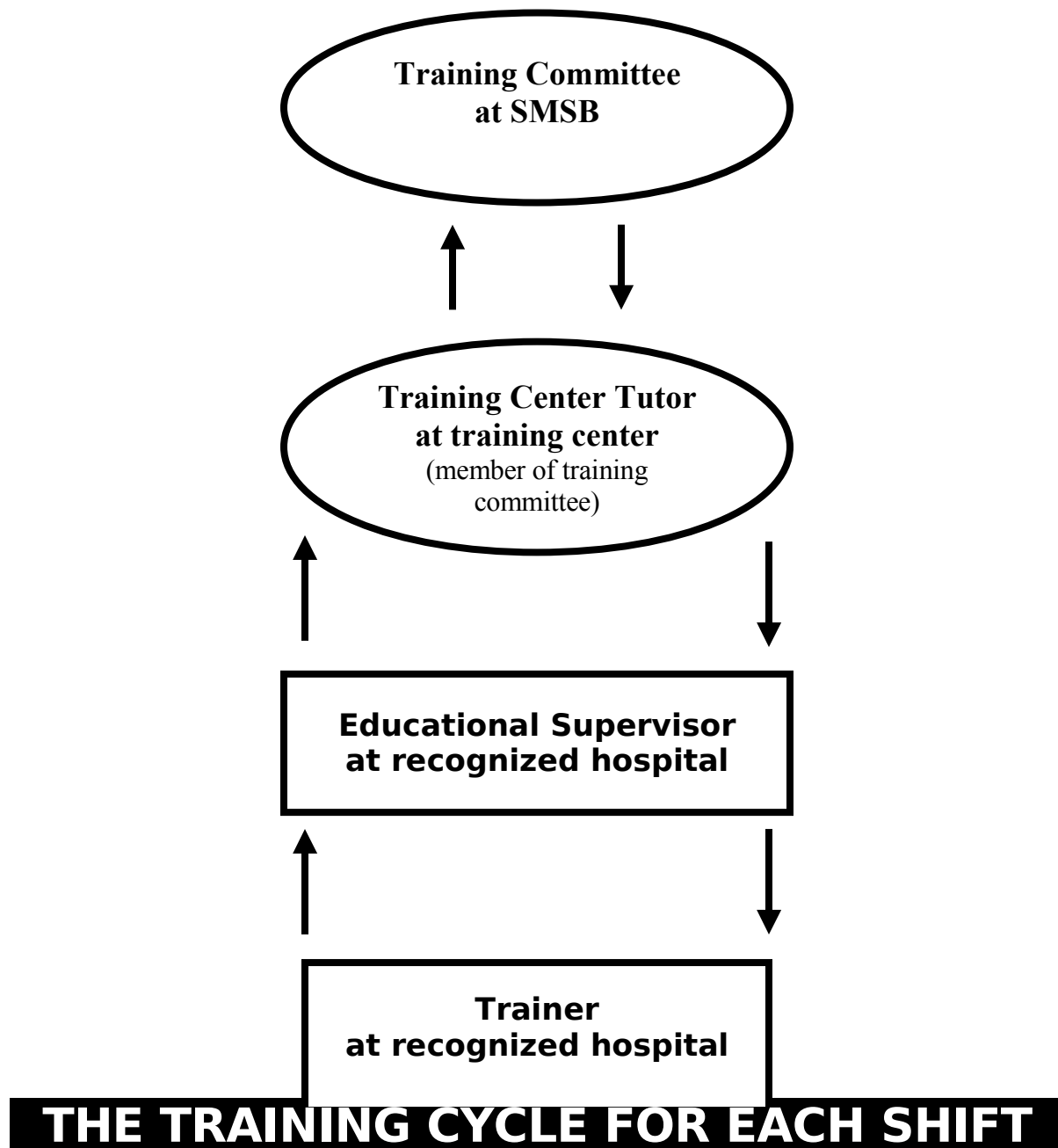
**7.9 Journal club**

**7.10 Morbidity and Mortality meetings**

**7.11 Audit meetings**

## **8. RESOURCES**

### **6.1 Human Resources**



1. **Trainers : (T)**



- The day-to-day clinical training remains the responsibility of consultant with whom they are working.
- The trainer would be expected to actively participate in educational programmes for trainees and be prepared to present lectures

2. **Educational Supervisors: (ES)**

- Hospital with more than one consultant in each unit should assign one of the consultants in each unit as an ES for the registrars working in that unit.
- Hospital with one consultant units should assign one consultant in that hospital as an ES for the registrars working in that hospital.
- When trainee moves to the next arm of rotation , a new ES in that new hospital would take over , but that there would be liaison between educational supervisors to provide seamless training for trainees from one rotation to another.
- The ES should be a consultant with commitment to training and an active participant in CPD.
- The ES should have one or more allocated trainees throughout the 6 months of each rotation and would oversee the training needs of the trainee .They would have received a report of the trainees previous appraisals and assessment.
- The ES would be the main appraiser of the trainee and would act as an advocate for the trainee at the time of assessment carried out by the training center Tutor.
- The ES should have attended training courses in educational supervision, a basic course in (Training the trainers) and an assessment and appraisal course and should regularly update themselves in these areas.

- The ES should be prepared to be assessed on a three – yearly basis.
- The ES would be expected to actively participate in educational programmes for trainees and be prepared to chair such session.

3. **Training Center Tutors: (TCT)**

- Each training centre should have an Education Centre Tutor .
- The training center tutor should have had at least two years of previous experience as Educational supervisor , have a special interest in training and act as lead or core trainer for obstetrics and gynaecology in individual training centre.
- The training center tutor lead the appraisal and assessment process of trainees and is involved in the annual assessment process.
- The training center tutor would also lead the induction & training of educational supervisors and support the SMSB Training Committee.
- Training center tutors should be allocated fixed session time.
- Training center tutors should have attended training courses in educational supervision, appraisal and assessment and should regularly update themselves in these areas.

## **6.2 Physical Resources:**

1. **Classical Library:**  
At SMSB, Training Centers and Hospitals
2. **Electronic Library:**

At SMSB, Training Centers and Hospitals

3. **Advance skill laboratory:**  
At the National CPD and the Training Centers
4. **Accredited Hospitals.**

## 9. METHODS OF ASSESSMENT

### PART-ONE EXAMINATION

The examination consists of two written papers. The time allowed for each paper is one and half hour.

**Paper 1:** consist of 60 one best answer questions (OBA) and include:

- Anatomy (14 questions)
- Embryology (4 questions)
- Endocrinology (19 questions)
- Microbiology (11 questions)
- Pharmacology (10 questions)
- Statistics and clinical trials design and analysis (2 questions)

**Paper 2:** consist of 60 one best answer questions (OBA) and include:

- Biochemistry (17 questions)
- Pathology (15 questions)
- Physiology (18 questions)
- Genetics and molecular biology (4 questions)
- Immunology (4 questions)
- Biophysics (2 questions)

The pass mark will be determined through a process of standard setting

## **PART-TWO EXAMINATION**

### **7.2.1 Eligibility for part-two examination:**

- Completion of the core training and at least 2 advanced skills modules

### **7.2.2 part-two methods of continuous evaluation**

- Induction/ Appraisal Form: **(Form APP)**
- Skills assessment: **(Form A13)**
- Formal assessment of certain core clinical skills should continue at shift 6, 7 & 8, these would be generic skills used by all specialists and should as far as possible be able to be assessed in any specialized clinical context. Properly selected, such skill could contribute to the appraisal of specialists following completion of training and could be used in the design of retraining programmes when these were required.

### **7.2.3 Written examinations:**

The examination consists of two written papers. The time allowed for each paper is three hours.

#### **Paper 1: (Obstetrics)**

Consist of 50 one best answer questions (OBA) and 5 short essays questions in obstetrics.

### **Paper 2: (Gynaecology)**

Consist of 50 one best answer (OBA) questions and 5 short essays questions in gynaecology.

- OBA = 40%
- Short essay = 60%

The pass mark will be determined through a process of standard setting

Only those who pass the written examination will be allowed to sit for OSCE examination.

### **7.2.4: Practical & Clinical examinations:**

#### **OSCE:**

Consist of 12 stations: 10 active and 2 preparatory. Each station is 15 Minutes.

The pass mark will be determined through a process of standard setting

### **7.2.6 Thesis examination:**

The proposal should be submitted by the end of the 2<sup>nd</sup> shift and by the end of the 7<sup>th</sup> shift the thesis should be submitted for assessment.

The assessment and discussion of the thesis will be performed by two examiners using a check list.

Only those who pass will be allowed to sit for Part 2 examination.

### **7.2.7 End of year examination (EYE) promotional exam.**

1. EYE1 BOF ( Best of five )
2. EYE2 PS, MEQ (Modified essay question)
3. EYE3 OSCE

### **7.2.8: Formative assessment (Hospital based clinical assessment)**

1. Mini – Clinical Evaluation Exercise ( Mini CEX)
2. CBD / case based discussion (Mini CBD)
1. Objective Structured Assessment of Technical Skill (OSATS)

## **10. EVALUATION OF TRAINING**

### **8.1: Evaluation of training hospitals:**

By the accreditation Committee at SMSB

### **8.2: Evaluation of training programme:**

1. Both internal and external evaluations ( external examiners reports)
2. Reports of the trainers (trainers feedback form)
3. Reports of the Trainees: (Training Evaluation Form - TEF Form)

## 9. DEGREE AWARDED

MD in Obstetrics & Gynaecology - Sudan

## 11. LIST OF REFERENCES

- Sudan Medical Council Good Medical Practice
- Maintaining Good Medical Practice in Obstetrics and Gynaecology: the Role of the RCOG (RCOG, February 1999; ISBN 1-900364-22-0)
- Gynaecological Examinations: Guidelines for Specialist Practice (RCOG, July 2002, 1- 900364-77-8)
- RCOG patient information ([www.rcog.org.uk](http://www.rcog.org.uk))
- StratOG.net.
- SANDS guidance for professionals
- Useful websites and postoperative care e-tutorials:
  - [www.nice.org.uk](http://www.nice.org.uk)
  - [www.rcog.org.uk](http://www.rcog.org.uk)
  - [www.sign.ac.uk](http://www.sign.ac.uk)
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  - [www.baasart](http://www.baasart)
  - [www.lpms](http://www.lpms)

- Disposal Following Pregnancy Loss Before 24 Weeks of Gestation (RCOG, January 2005)
- Obtaining Valid Consent (RCOG, October 2004)
- RCOG Consent Advice series
- DH website
- Faculty of Sexual and Reproductive Health Care Letter of Competence in Intrauterine Techniques (LoC IUT)
- Faculty of Sexual and Reproductive Health Care Letter of Competence in Subdermal Implants (LocSdl)
- SIGN guidelines
- Understanding Audit (RCOG; October 2003)
- Principles for best practice in audit (NICE)
- Searching for Evidence (RCOG, October 2001)
- Clinical Risk Management for Obstetricians and Gynaecologists (RCOG, January 2001)
- jh ■ Clinical Governance Bulletin series (DH funded)  
[www.clinicalgovernance.com](http://www.clinicalgovernance.com)
- Introduction to Research Methodology, 2nd edition (RCOG Press, 2007)
- The Obstetrician & Gynaecologist journal



## **12. ANNEX**

1. The Guide to Structured Training
2. Logbooks:
  - Core logbook
  - Advanced Training Skills Modules
3. Portfolio
4. Trainer feedback
5. Trainee feedback (TEF Form)
6. Forms of formative assessment